

■ **PRE-CONSTRUCTION
REMEDIAL ACTIVITIES
REPORT**

■ For:

**COURTHOUSE SQUARE
SALEM, OREGON**

■ Presented To:

**MARION COUNTY
100 HIGH STREET NE
SALEM, OREGON 97301**



April 14, 1998

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PreConstruction Remedial Activity Report

PRE-CONSTRUCTION
REMEDIAL ACTIVITIES REPORT

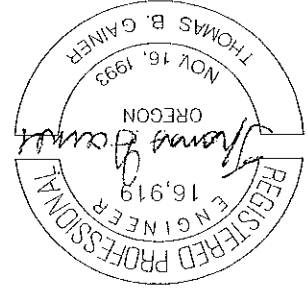
Courthouse Square
Salem, Oregon

Prepared for:

Marion County
100 High Street NE
Salem, Oregon 97301

Prepared by:

CENTURY WEST ENGINEERING CORPORATION



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April 14, 1998

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A handwritten signature in cursive script, appearing to read "Ingnar Saul", written over a horizontal line.

EXECUTIVE SUMMARY

Century West Engineering Corporation (Century West) was retained by Marion County to develop and oversee pre-construction remedial activities at the Courthouse Square block in downtown Salem, Oregon. Prior to pre-construction remedial activities, all buildings and associated basements on the Courthouse Square block were demolished and removed. Remedial activities were conducted on the Courthouse Square site from October 16, 1997 through January 2, 1998.

Investigative or remedial activities were conducted at 17 areas of known or suspected subsurface contamination on the Courthouse Square block. This document describes subsurface investigations, decommissioning of underground storage tanks (USTs), decommissioning of test wells, and associated remedial activities at twelve sites to prepare the Courthouse Square block for subsequent re-development by Marion County. Remedial activities on the southeast portion of the block, including the former Liu (identified as Site 2) and Chevron (identified as Sites 6, 7, 15, and 16) properties, are not included in this report and are documented separately.

Based on field observations and laboratory data, Century West has prepared the following findings and conclusions:

Site 1 - Senator/Jr. Bootery Gasoline Station

Two 575-gallon USTs from a historical gasoline station were decommissioned in-place. Soil beneath each tank and the suspected dispensing/product piping area showed no detectable petroleum contamination, indicating that there was no significant release of product from the two tanks.

Site 3 - Harbison Gasoline Station

One 4,000-gallon and two 2,000-gallon USTs from a historical gasoline station were decommissioned in-place. Soil beneath each tank showed low to non-detectable petroleum contamination at concentration below Oregon Department of Environmental Quality (DEQ) Level 2 cleanup standards, indicating that there was no significant release of product from the three tanks. Approximately 492 tons of petroleum contaminated soil was removed from the suspected dispensing/product piping area, and the confirmation sample indicated that the extent of excavation was sufficient to meet DEQ Level 2 cleanup standards.

Site 4 - Senator Boiler UST Investigation

USTs were not found during the investigative excavation in the suspect area associated with the Senator Hotel Building's boilers.

Site 5 - Beri Building UST Investigation

USTs were not found during the investigative excavation in the suspect area associated with historical auto repair activities in the east end of the Beri Building.

Site 8 - Drywell and UST Decommissioning
One 250-gallon and one 1,000-gallon UST located near ground surface were decommissioned by removal. Soil beneath each tank showed no detectable petroleum contamination, indicating that there was no significant release of product from the two tanks. Soil analyses indicated that a brick-lined drywell did not appear to be used for wastes such as solvents, metals, or polychlorinated biphenyls (PCBs). Approximately 492 tons of diesel-range contaminated soil located between 10 and 18 feet below ground surface (bgs) was removed and disposed off-site. Confirmation soil samples indicated that the horizontal and vertical extent of excavation was sufficient. Groundwater entered the excavation, and a water sample collected after the groundwater was purged and allowed to recharge indicated that groundwater was not impacted.

Site 9 - Beri Parking Lot Diesel Remediation
Approximately 546 tons of diesel-range contaminated soil located between 10 and 18 feet bgs was removed and disposed off-site. Confirmation soil samples indicated that the horizontal and vertical extent of excavation was sufficient. Groundwater entered the excavation, and a water sample collected after the groundwater was purged and allowed to recharge indicated that groundwater was not impacted.

Site 10 - Beri Building Soil Investigation
Petroleum-contaminated soil was not found during the investigative excavation in the suspect area associated with a previously decommissioned UST adjacent to the west side of the Beri Building.

Site 11 - Senator Parking Lot Drywell Investigation
Petroleum hydrocarbons, solvents, metals, and PCBs were not found in a confirmation soil sample collected during the investigative excavation in the area suspected of being a drywell in the Senator parking lot. No physical evidence of a drywell was observed.

Site 12 - Goldberg Building Drywell Investigation
Diesel-range soil contamination, but no solvents, metals, and PCBs, were found in soil during the investigative excavation in the area suspected of being a drywell at the northwest corner of the former Goldberg property. No physical evidence of a drywell was observed, and the source may have been from historical use of USTs (including possible fill-pipe spills) in the vicinity which were previously decommissioned by others. Approximately 101 tons of diesel-range contaminated soil located between 10 and 15 feet bgs was removed and disposed off-site. Confirmation soil samples indicated that the horizontal and vertical extent of excavation was sufficient. Groundwater did not enter the excavation.

Site 13 - Vehicle Hoist Removal
Petroleum-contaminated soil was not found during the removal of a vehicle hoist. A small quantity of petroleum-contaminated soil (primarily lube oil) with trace concentrations of PCBs was found inside the hoist and was properly disposed of off site.

Site 14 - Senator Parking Lot UST Investigation
USTs were not found during the investigative excavation in the suspect area associated with historical activities in the west side of the Senator parking lot.

Site 17 - Senator Parking Lot Well Decommissionings
Three pumping test wells were decommissioned by grouting according to state requirements.

Recommendations

Based upon the conclusions of this investigation, Century West offers the following recommendations.

- No additional investigation or remediation is warranted at the 12 sites addressed in this document.
- Provide environmental oversight during planned excavation activities on the Courthouse Square block in the construction phase of site redevelopment to address potential/unknown subsurface contamination which has not been identified to date.
- Submit this report to the DBO.

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**PRE-CONSTRUCTION
REMEDIAL ACTIVITIES REPORT**

**Courthouse Square
Salem, Oregon**

1.0 INTRODUCTION

Century West Engineering Corporation (Century West) was retained by Marion County to develop and oversee pre-construction remedial activities at the Courthouse Square block in downtown Salem, Oregon. Prior to pre-construction remedial activities, all buildings and associated basements on the Courthouse Square block were demolished and removed. This document describes subsurface investigations, decommissioning of underground storage tanks (USTs), decommissioning of test wells, and associated remedial activities to prepare the Courthouse Square block for subsequent re-development by Marion County. Remedial activities on the southeast portion of the block, including the former Liu and Chevron properties, are not included in this report and are documented separately.

The pre-construction remedial activities were conducted according to Century West's Work Plan submitted on August 27, 1997, amended on September 30, 1997, and approved by the Oregon Department of Environmental Quality (DEQ) on October 15, 1997. Foss Environmental Services of Portland, Oregon was contracted by Marion County to perform pre-construction remedial services on the Courthouse Square block. These services included investigative and remedial excavations, UST decommissioning, and limited restoration of the site. Remedial activities were conducted on the Courthouse Square site from October 16, 1997 through January 2, 1998.

Tables A through D are presented within the body of this report and all other tables and figures are located following the body of this report.

2.0 SITE DESCRIPTION

2.1 Site Setting

The subject site is an approximately 2.5-acre, square-shaped parcel of land located in downtown Salem. It consists of the city block which is bounded to the north by Chemeketa Street, to the east by Church Street, to the south by Court Street, and to the west by High Street (Figure 1). The property is located in Sections 22 and 27, Township 7 South, Range 3 West of the Salem West Quadrangle. Prior to demolition activities, the Courthouse Square block included several

county-owned buildings, a storage building, a vacant lot which was formerly occupied by a gas station, and two parking areas (Figure 2). At the start of preconstruction remedial activities, the site surface was primarily dirt at street elevation with depressions of approximately ten feet below ground surface (bgs) where subsurface basements had been removed by others.

2.2 Adjacent Properties

The city block to the north of the subject property is occupied by the Commercial Bank, a parking structure, and retail businesses. On the block to the northwest is the First Security bank. On the block to the west is the First Interstate Bank, a parking lot, apartments and retail businesses. On the block to the southwest is the Oddfellows Meeting Hall and the Salem Area Transit office and bus mall. The block to the south is occupied by the Marion County Courthouse and parking structure. The block to the southeast is occupied by the State of Oregon Administrative Services building. On the block to the east is the Statesman Journal newspaper building. Offices are located on the block to the northeast.

2.3 Local Geology and Hydrogeology

The subject property is located near the Willamette River flood plain at the southern end of the Eola-Amity Hills, an upland area capped by basalt from the Columbia River Group. The Eola-Amity Hills are part of the western limb of a broad syncline with a north-northeast trending axis. Deformation occurred in pre-Pliocene rocks including those of the Columbia River Basalt and underlying marine sediments. Sediments deposited after the Pliocene, including the Willamette Silt and the local equivalent of the Troudale Formation, filled the topographic lows of the syncline and are not deformed. The post-Pliocene sediments commonly become thinner near the eastern flanks of the Eola-Amity Hills and underlie the subject property to a depth of approximately 150 to 260 feet.

Groundwater is replenished primarily by direct infiltration of precipitation which averages about 40 inches per year in Salem. Groundwater is present at a depth of approximately 10 to 15 feet bgs. Groundwater flow appears to be toward the northwest to the Willamette River from the subject property. However, manmade features and variations in sediment deposition can create preferential pathways which can strongly influence the local groundwater flow direction.

2.4 Previous Investigations

The following document was produced concerning environmental issues related to the Courthouse Square block:

Subsurface Investigation Report, Courthouse Square, Century West Engineering, March 14, 1997.

3.0 REGULATORY FACTORS

3.1 Department of Environmental Quality Numeric Soil Cleanup Levels

DEQ regulations OAR 340-122-305 through 340-122-335 may be used to determine site specific total petroleum hydrocarbon (TPH) numeric soil cleanup standards. These rules apply to the cleanup of releases from UST systems containing motor fuel and heating oil and are commonly referred to as the Soil Cleanup Matrix. DEQ regulations require that site conditions be protective of public health, safety, welfare and the environment. Because petroleum hydrocarbons were detected in confirmation samples, it is necessary to determine the applicable Soil Cleanup Matrix value for the site.

To determine the applicable Soil Cleanup Matrix value for a particular site, a numeric score is assigned to each of five site-specific parameters and the total is used, in conjunction with the contaminant type, to select the appropriate numeric value. Table A presents the numeric scores used to determine the Soil Cleanup Matrix guidance score for the site.

TABLE A DEQ SOIL MATRIX SCORE SHEET		
Parameter	Assigned Score	Explanation
1. Depth to groundwater	10	<25 feet
2. Mean annual precipitation	5	20 - 45 inches
3. Native soil type	10	High permeability materials; Fine silty-sands, sands and gravels.
4. Sensitivity of uppermost aquifer	7	Potable aquifer
5. Potential receptors	5	Distance to nearest well < 1/2 - 2 miles, with 100 - 3000 potential receptors.
TOTAL	37	Level 2 Cleanup Category

The TPH cleanup concentrations for soil impacted by gasoline- and diesel-range petroleum hydrocarbons at a Level 2 site are 80 and 500 milligrams per kilogram (mg/kg), respectively. The soil matrix cleanup rules are not directly applicable when groundwater is impacted, but are appropriate to guide soil cleanup.

3.2 Groundwater Cleanup Levels

The following groundwater cleanup levels, applicable to petroleum-impacted UST sites (OAR 340-122-242), are utilized in this document:

Compound	Concentration (µg/L)
<i>Volatile Aromatic Hydrocarbons</i>	
Benzene	5
Toluene	1,000
Ethylbenzene	700
Xylenes	10,000
<i>Polynuclear Aromatic Hydrocarbons</i>	
<i>Carcinogenic</i>	
Benzo(a)pyrene	0.2
Benzo(a)anthracene	0.1
Benzo(b)fluoranthene	0.2
Benzo(k)fluoranthene	0.2
Chrysene	0.2
Dibenzo(a,h)anthracene	0.3
Indenopyrene	0.4
<i>Non-carcinogenic</i>	
Acenaphthene	420
Anthracene	2,100
Fluoranthene	280
Fluorene	280
Naphthalene	28
Pyrene	210

4.0 PRE-CONSTRUCTION REMEDIAL APPROACH

As shown on Figure 2 and described in the following Table B, investigative or remedial activities were conducted at 17 areas of known or suspected subsurface contamination on the Courthouse Square block. The remainder of this document is organized by the 17 sites; sites numbered 2, 6, 7, 15, and 16 are not reported in this document and will be reported separately. The areas of interest (sites) were based on Century West's *Subsurface Investigation Report* (March 14, 1997), which included a summary of historical property use records. Petroleum hydrocarbons were identified as the contaminants of concern, with DRO Matrix Level 2 soil cleanup standards of 80 milligram per kilogram (mg/kg) gasoline-range total petroleum hydrocarbons (TPH) and 500 mg/kg diesel-range TPH used to identify soil investigation areas.

Photographs of pre-construction remedial activities are presented in Appendix A.

TABLE B PRE-CONSTRUCTION REMEDIAL ACTIVITIES COURTHOUSE SQUARE			
Site # (Fig. 2)	Location/Description	Underground Storage Tank(s)	Drywell
1.	Senator/Junior Bootery	2	
2. *	Liu Property (beneath north end of former building)	1	
3.	Harbison Station (NW corner of block)	5	X
4.	Senator Boiler (beneath sidewalk on High St.)		X
5.	Beri Building (beneath former building)		X
6. *	Chevron UST Nest		X
7. *	Chevron Former Used Oil UST		X
8.	Senator Parking Lot		X
9.	Beri Parking Lot		X
10.	Beri Decommissioned UST (alley)		X
11.	Senator Lot (potential drywell)		X
12.	Goldberg Building (potential sump)		X
13.	Vehicle Hoist		X
14.	Suspect USTs		X
15. *	Chevron Drywell		X
16. *	Chevron Used Oil UST	1	
17.	Decommission Dewatering Monitoring and Test Wells		

* Activities not included in this document.

4.1 Soil

The general pre-construction remedial approach for this site included excavation and off-site disposal of soil exceeding Level 2 concentrations to the extent practicable. Excavation extended to the proposed construction excavation depth (approximately 12 feet bgs). Excavation of soil beyond three feet below the groundwater table (for a maximum excavation depth of approximately 17 to 18 feet bgs). The proposed subsurface parking structure slab will cover the majority of the block at approximately 12 feet bgs, in effect capping the site and eliminating potential exposure to potential remaining contaminants.

The lateral extent of remedial excavation continued until confirmation samples were below DEQ cleanup levels as practicable to support site closure; excavation did not extend beyond the property line into the street. Individual excavations were generally left open to be incorporated into construction excavation activities to the extent appropriate under safety regulations. Non-impacted overburden soil was placed in stockpiles, sampled, and analyzed prior to use as cover material at Marion County's Brown's Island Landfill located in Salem, Oregon. Contaminated soil was placed on stockpiles on and covered by plastic sheeting prior to off-site disposal at Riverbend Landfill located in McMinville, Oregon. Soil quantities transported to the two off-site landfills are summarized in Section 13.1.

The remedial excavations were generally not backfilled because site redevelopment plans include excavation and construction of a subsurface parking garage across the majority of the block. Following remedial excavations, excavation walls were graded to at least 1:1 slopes to minimize potential slope failure, using non-impacted on-site soil where necessary to fill in a slope.

Sampling Methodology

Soil samples from excavations were collected by removing a trackhoe bucket of soil from a desired location. Based on visual observations, a representative soil sample was subsequently collected from the contents of the trackhoe bucket. All samples were collected using a new clean pair of disposable latex gloves. After soil sample collection was complete, the trackhoe bucket contents were emptied and the trackhoe was moved to the next sampling location. Sampling procedures were then repeated. Samples were placed in minimal-headspace nine-ounce glass jars with Teflon-lined lids and assigned sample identification numbers ending with the sample depth in feet below ground surface (bgs); for example, sample 3-2-10.5' was collected from Site 3 at Courthouse Square, was the second sample collected at that site, and was collected from 10.5 feet bgs. Soil sample locations are presented in Figures 3 - 7, and laboratory analytical reports are presented in Appendix B.

Soil samples were collected from excavated clean overburden soil piles to confirm the absence of petroleum products. These samples were identified "SP."

The samples were chilled and transported with attendant chain of custody to Specialty Analytical or TEG Northwest, Inc laboratories for total petroleum hydrocarbons-hydrocarbon identification (NWTPH-HCID) analysis with quantification using the DEQ-approved methods. Select samples with elevated petroleum hydrocarbon concentrations were also analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020 and polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270. Areas suspected of used oil or other waste contamination, including used oil USTs and drywells, were additionally sampled and analyzed for volatile organic compounds (VOCs) using Methods 8260 or 8010, leachable cadmium, chromium, and lead using Methods 1311 and 6010, and polychlorinated biphenyls (PCBs) using Method 8080.

4.2 Groundwater

Groundwater encountered during excavation was pumped into 20,000-gallon portable storage tanks for characterization and appropriate on-site treatment/disposal. On-site water treatment consisted of air sparging within 20,000-gallon portable tanks, carbon filtration, and sediment filtration. Treated water was discharged into the City of Salem's storm water pipes at the northeast and southeast corners of the block under a National Pollutant Discharge Elimination System (NPDES) permit number 1500A. Discharge monitoring results and on-site water disposal quantities are summarized in Section 13.2.

Sampling Methodology

Groundwater recharged into the excavation was sampled and analyzed per OAR 340-122-340. Double check-valve disposable bailers were used to collect groundwater samples. Groundwater was transferred into zero-headspace 40-milliliter vials with Teflon septa and 32-ounce amber bottles with Teflon-lined lids. The samples were preserved, chilled and transported under chain-of-custody conditions to Specialty Analytical laboratory for BTEX and PAH analyses.

4.3 Underground Storage Tanks

USTs encountered during pre-construction remedial activities were decommissioned by removal or in-place according to DEQ requirements (OAR 340-122-305 through -355) and applicable guidance. The USTs were decommissioned by removal unless structural integrity of surrounding structures was threatened. The five USTs beneath the High Street sidewalk were decommissioned in place to preserve the structural integrity of High Street paving and potential underground utilities.

If liquid was present in the UST, it was pumped out for characterization and treatment/disposal. Tanks decommissioned by removal were transported off-site by the contractor for cleaning and metal recycling. Tanks decommissioned in place were cut open at the top so that the contractor could enter the tank for cleaning and to drill through the tank bottom to collect soil samples. Soil

samples were collected from six to twelve inches beneath the ends of each UST to evaluate if the tanks had leaked.

Tank recycling receipts and DEQ UST decommissioning forms are presented in Appendices C and E, respectively.

5.0 SENATOR/JR. BOOTERY (Site 1)

During demolition of the Senator Hotel Building, signs painted on the walls of the former Jr. Bootery street-level store indicated that this part of the building was historically used to dispense gasoline. Century West's historical review indicated that this area had been used as a garage between 1926 and 1950. Although no fuel dispensers were present, two USTs were discovered about 4.5 feet beneath the sidewalk along High Street, identified as UST5 and UST6 on Figure 3. Each UST had a capacity of 575 gallons, was empty, and showed no signs of leakage.

Since removal of the USTs would have caused structural instability for the street, the USTs were decommissioned in place according to a DEQ-approved plan. Soil samples were collected from 6 to 12 inches beneath each end of each UST (Figure 3). The east end of the tanks were exposed by excavation and soil samples were collected using a hand trowel. Soil samples from beneath the west end of the tanks were collected by drilling a hole through the bottom of the tank. Following soil sampling activities, the tanks were filled with a concrete slurry mixture and existing fill was placed around the tanks to stabilize the slope from the street.

Product pipelines from the USTs into the Senator Hotel Building were not found. The area immediately east of UST5 and 6 was already graded at approximately ten feet due to basement demolition activities. As shown in Figure 3, soil was excavated to the north and northeast of the USTs to a depth of ten feet to investigate potential piping or contamination leading into the building where the gas dispenser signs were found. There was no visual or olfactory evidence of petroleum contamination in this excavation and groundwater was not encountered.

5.1 Analytical Results

As shown in Table 1, petroleum hydrocarbons were not detected in soil beneath the ends of UST5 or UST6, in confirmation samples from the pipeline/dispenser investigative excavation, or in the excavated soil piles, indicating that there was no evidence of product release from the operation of the two USTs. Therefore, no further investigation or remediation is recommended for this site. Soil excavated from this site had no detectable petroleum hydrocarbons and was transported to Brown's Island Landfill.

6.0 HARRISON STATION (Sites 3, 8, 11, and 14)

The former Harrison gasoline station was located in the northwest corner of the Courthouse Square block (Figure 2), and operated between 1926 and 1961. Historical records indicate that a farm equipment/vehicle repair facility and a battery repair facility also operated in this time period immediately east of the gasoline station (Century West, March 14, 1997). The following four areas were addressed in this vicinity:

Location	Investigation
Site 3	Locate and decommission USTs associated with Harrison station
Site 8	Diesel-contaminated soil identified during Subsurface Investigation (Century West, March 14, 1997)
Site 11	Potential drywell observed in parking lot prior to demolition
Site 14	Potential USTs indicated on historical maps

6.1 Site 3 UST Decommissionings

Three USTs were discovered beneath the High Street sidewalk at the intersection with Chemekeeta Street which were likely part of the gasoline station operations (Figure 4). UST1, UST2, and UST3 had volumes of 4,000, 2,000, and 2,000 gallons, respectively. UST1 and UST2 were full of water and UST3 was empty. None of the three tanks showed evidence of contamination in the underlying soil. The residual sludge in UST3 was additionally analyzed for used oil constituents because it had a peculiar odor. Residual sludge from the tanks was removed and disposed off site before the three USTs were decommissioned in place.

A thin layer of petroleum-contaminated soil at approximately 7 to 8.5 feet bgs was observed to the east of UST2 beneath the former gasoline station's pump island. This soil was removed for off-site disposal, and soil sample 3-1-10.0' was collected to confirm adequate removal activities. The excavation continued south of UST3 to search for additional USTs and none were found. Groundwater was not encountered in the Site 3 excavation.

6.1.1 Analytical Results

As shown in Table 2, analysis of the sludge in UST3 indicated that it was primarily kerosene with no unusual constituents, solvents, or PCBs; therefore, soil confirmation sample 3-UST3-2-9.5' was analyzed for TPH-D only. Petroleum hydrocarbons were not detected in UST1 or UST2 confirmation soil samples and were detected in concentrations below Level 2 cleanup levels beneath UST3, indicating that there was no significant release of product from the operation of the three USTs. Non-detectable petroleum hydrocarbons in confirmation sample 3-1-10.0' indicates that the small quantity of petroleum-contaminated soil beneath the pump island was sufficiently removed. Therefore, no further investigation or remediation is recommended for this site.

Except for soil pile #2 which was disposed at Riverbend Landfill, petroleum hydrocarbons were not detected in the clean overburden excavated soil piles (Table 2). The clean soil piles were transported to Brown's Island Landfill.

6.2 Site 8 Soil Excavation, Drywell Investigation, and UST Decommissionings

As shown on Figure 4, Site 8 activities included excavation of petroleum-contaminated soil, a drywell investigation, and decommissioning two USTs by removal.

Soil Excavation

Century West's Subsurface Investigation found diesel contaminated soil located in the north central portion of the Senator Hotel parking lot near Chemeketa Street (Figure 2). The Site 8 excavation removed this diesel-contaminated soil to acceptable concentrations. Figure 4 shows that the lateral extent of excavation was approximately 72 feet long by 52 feet wide. The vertical extent of excavation was between 15 and 18 feet bgs, and soil contamination started at approximately 10-12 feet bgs. Nine soil confirmation samples were collected from the excavation floor and sidewalls (near the soil/water interface) for analyses (Figure 4).

Groundwater was encountered at about 15 feet bgs, and approximately 19,000 gallons of water was pumped from the excavation after soil excavation activities were completed. The excavation water was treated on site and discharged under the NPDES permit (see Section 13.2). After groundwater recharged overnight into the excavation, sample 8-1-GW was collected from the excavation water to evaluate groundwater quality. Groundwater entering the excavation showed no evidence of significant petroleum sheen or free product.

Drywell Investigation

As the soil excavation proceeded to the south, three subsurface features were discovered: a drywell and two USTs. The drywell was about two feet in diameter, constructed with bricks, extended to approximately 14 feet bgs, and did not contain waste materials at the time of discovery. Soil sample 8-3-14.5' was collected immediately beneath the bottom of the drywell and was analyzed for used oil components. Although a definitive source for Site 8 soil contamination was not evident, the drywell appeared to be a likely source for the contamination.

UST Decommissionings

UST4 was an empty steel 250-gallon tank located 0.5 feet bgs. There did not appear to be soil contamination resulting from this tank, although it was located above the Site 8 soil collected beneath the tank after its removal.

UST8 was an empty steel 1,000-gallon tank located two feet bgs. It was suspected of being a heating oil tank due to its location among buildings identified in the historical maps. There did not appear to be soil contamination resulting from this tank, although it was located within the

Site 8 soil contamination area. Soil samples 8-UST8-1-6.0' and 8-UST8-2-6.0' were collected beneath the tank after its removal.

6.2.1 Analytical Results

Soil Excavation

As shown in Table 3, the six excavation sidewall samples showed TPH-D concentrations below the DEQ action level of 500 mg/kg, except on the north and northwest walls of the excavation. The two sidewall confirmation samples that showed elevated TPH-D, 8-4-15.0' and 8-12-15.0', had BTEX and PAH concentrations well below applicable cleanup levels. Therefore, the elevated TPH-D does not appear to pose a risk to human health and the environment. Soil samples with the next two highest TPH-D concentrations were also analyzed for BTEX and significant concentrations were not detected. Results from the two excavation floor samples, 8-5-18.0' and 8-11-18.0', indicate that the vertical extent of excavation was sufficient. Soil analytical results indicate that diesel-contaminated soil was removed laterally and vertically to satisfy applicable DEQ cleanup levels for TPH, BTEX, and PAHs. The non-impacted overburden soil was transported to Brown's Island Landfill since no petroleum hydrocarbons were detected in the soil pile samples.

Groundwater sample 8-1-GW showed non-detectable BTEX and PAHs except for naphthalene, which was detected at 2.2 µg/L, well below the 28 µg/L DEQ groundwater cleanup level for naphthalene. Therefore, it does not appear that groundwater was impacted outside the extent of excavation.

Soil and groundwater analytical results from the Site 8 soil excavation indicate that no further investigation or remediation is required.

Drywell Investigation

NWTPH-HCID results from confirmation soil sample 8-3-14.5' detected diesel-range petroleum hydrocarbons, which was quantified as 310 mg/kg diesel by NWTPH-DX. This confirmation sample showed no detectable TCLP cadmium, chromium, or lead, halogenated solvents, or PCBs. Therefore, it appears that this drywell was not used for wastes other than perhaps diesel-range petroleum, and no further investigation or remediation is recommended. Soil surrounding the drywell was excavated and managed with the Site 8 soil excavation described previously.

UST Decommissionings

Although only lube oil was detected in the TPH-HCID of the confirmation soil sample beneath UST4 (3-UST4-2-6.0'), neither diesel or lube oil was detected in the diesel quantification analysis. Therefore, it appears that operation of UST4 did not result in a release to the environment. Soil was excavated to approximately 15 feet bgs beneath UST4 to remove underlying soil contamination from another source.

Petroleum hydrocarbons were not detected by NWTPH-HCID in the two confirmation soil samples beneath UST8 (8-UST8-1-6.0' and 8-UST8-2-6.0'). Therefore, it appears that operation of UST8 did not result in a release to the environment. Soil was excavated to approximately 18 feet bgs beneath UST8 to remove underlying soil contamination from another source. No further investigation or remediation is recommended for the decommissioning of UST4 and UST8.

6.3 Site 11 Drywell Investigation

Soil was excavated to 12 feet bgs in the vicinity of the suspected drywell (Figure 4). There was no physical evidence of a drywell or visual/olfactory evidence of contamination. Confirmation soil sample 11-1-12.0' was collected at the excavation bottom, and petroleum hydrocarbons were not detected by NWTPH-HCID analysis in this confirmation sample or in a sample from the excavated soil. The excavated soil was transported to Brown's Island Landfill.

No further investigation or remediation is recommended for Site 11.

6.4 Site 14 UST Investigation

Historical maps showed USTs beneath the sidewalk in the Site 14 area (Figure 4). Excavation to approximately 12 feet bgs revealed no USTs or visual/olfactory evidence of contamination in this location. Samples 14-1-SF and 14-2-SF were collected from the excavated soil, and petroleum hydrocarbons were not detected by NWTPH-HCID analysis. The excavated soil was transported to Brown's Island Landfill.

No further investigation or remediation is recommended for Site 14.

7.0 SENATOR BOILER (Site 4)

Historical maps indicated the presence of a UST related to the Senator Hotel Building (boiler) beneath the sidewalk in the Site 4 area (Figure 2). Excavation to approximately 12 feet bgs revealed no USTs or visual/olfactory evidence of contamination in this location.

No further investigation or remediation is recommended for Site 4.

8.0 BERI BUILDING (Sites 5 and 10)

Historical maps indicated the presence of a automobile repair facility in the Beri Building, and the presence of USTs was suspected beneath the sidewalk at Site 5 (Figure 5). Excavation to

approximately 12 feet bgs revealed no USTs or visual/olfactory evidence of contamination in this location. Confirmation soil sample 5-1-12.0' was collected from the floor of the excavation.

A heating oil UST was decommissioned in 1989 in the alley along the western side of the Beri Building. After investigative and remedial activities conducted between 1990 and 1992 by Marion County's consultant, the DEQ granted site closure in a August 27, 1992 letter (LUST No. 24-89-4194). The Site 10 excavations were conducted to investigate a potential inaccessible pocket of diesel-contaminated soil extending beneath the Beri Building. Three excavations to approximately 12 feet bgs revealed no visual/olfactory evidence of contamination in these locations. Confirmation soil sample 10-1-12.0' was collected from the floor of the excavation (Figure 5).

8.1 Analytical Results

The TPH-HCID analysis of sample 5-1-12.0' and two samples of the excavated soil, 5-2-SP and 5-3-SP, detected no petroleum hydrocarbons. The excavated soil was transported to Brown's Island Landfill. No further investigation or remediation is recommended for Site 5.

The TPH-D analysis of sample 10-1-12.0' and TPH-HCID analysis of the excavated soil, 10-1-SP, detected no petroleum hydrocarbons. The excavated soil was transported to Brown's Island Landfill.

No further investigation or remediation is recommended for Site 10.

9.0 BERI PARKING LOT (Site 9)

Century West's Subsurface Investigation found diesel contaminated soil located in the eastern portion of the Beri Building parking lot near Church Street (Figure 2). The Site 9 excavation removed this diesel-contaminated soil to acceptable concentrations. Figure 6 shows that the lateral extent of excavation was approximately 57 feet long by 41 feet wide. The vertical extent of excavation was between 15 and 18 feet bgs, and soil contamination started at approximately 10-12 feet bgs. Eleven soil confirmation samples were collected from the excavation floor and sidewalls (near the soil/water interface) for NWTPH-Dx analyses (Figure 6).

Groundwater was encountered at about 15 feet bgs, and approximately 17,000 gallons of water was pumped from the excavation after soil excavation activities were completed. The excavation water was treated on site and discharged under the NPDES permit (see Section 13.2). After groundwater recharged overnight into the excavation, sample 9-1-GW was collected from the excavation water to evaluate groundwater quality. Groundwater entering the excavation showed no evidence of significant petroleum sheen or free product.

9.1 Analytical Results

As shown in Table 4, the seven excavation sidewall samples showed TPH-D concentrations below the DEQ action level of 500 mg/kg, except in the southwest corner of the excavation. The two sidewall confirmation samples that showed elevated TPH-D, 9-10-14.0' and 9-13-15.0', had PAH concentrations well below applicable cleanup levels. Similarly, the four excavation floor samples showed TPH-D concentrations below the DEQ action level of 500 mg/kg, except for sample 9-3-18.0', which showed non-detectable PAHs. Therefore, the elevated TPH-D at limited sample locations does not appear to pose a risk to human health and the environment.

Four soil samples representing elevated TPH-D concentrations and spatial distribution throughout the excavation were also analyzed for BTEX. Soil BTEX analytical results were well below DEQ action levels. The soil analytical results indicate that diesel-contaminated soil was removed laterally and vertically to satisfy applicable DEQ cleanup levels for TPH, BTEX, and PAHs. The overburden soil was transported to Riverbend Landfill along with the more heavily impacted soil from 10 to 18 feet bgs, since slight petroleum hydrocarbon odors were detected in the overburden during excavation.

Groundwater sample 9-1-GW showed non-detectable BTEX and PAHs except for trace acenaphthylene and naphthalene, which were detected at 0.8 and 4.1 µg/L, respectively, well below DEQ groundwater cleanup levels. Therefore, it does not appear that groundwater was impacted outside the extent of excavation.

Soil and groundwater analytical results from the Site 9 soil excavation indicate that no further investigation or remediation is required.

10.0 GOLDBERG BUILDING (Site 12)

Petroleum-contaminated soil was observed at approximately 10 to 12 feet bgs during excavation in the vicinity of a potential sump located in the alley at the northeast corner of the Goldberg Building. Soil sample 12-1-12.0' was collected within the most heavily contaminated zone to initially evaluate used oil components. The excavation resumed after analyses confirmed that the only contaminant of concern at Site 12 was diesel-range petroleum hydrocarbons. The final extent of excavation (Figure 7) was approximately 25 feet wide, 27 feet long, and 15 feet deep, and six soil confirmation samples were collected. Groundwater was not observed during excavation activities.

The contaminant source was not firmly identified. Physical evidence of a drywell or other potential source objects were not encountered during Site 12 excavation activities. Three petroleum USTs and one aboveground storage tank were reportedly located within the east/west alley, although decommissioning reports (by others) did not indicate releases from these tanks.

At least one of these three USTs had a fill pipe which extended to the intersection of the two alleys, and pipe leakage and/or overflow spills is the likely source of petroleum contamination encountered during Site 12 excavation activities.

An inactive sanitary sewer pipe related to one of the demolished buildings was encountered in the east/west alley. The east/west sewer pipe was subsequently decommissioned at the active north/south sanitary sewer pipe.

10.1 Analytical Results

As shown in Table 5, analysis of soil sample 12-1-12.0' indicated that suspect used oil components, including halogenated solvents, metals, and PCBs, were not present; the trace chloromethane may be a laboratory contaminant and its concentration is not of concern. The TPH-HCID and quantification indicates that the contaminants at Site 12 are diesel and lube oil. All sidewall and floor confirmation samples are below DEQ action levels, indicating that the lateral and vertical extent of excavation was sufficient. Note that the area in the vicinity of sample 12-1-12.0' was further excavated to approximately 15 feet bgs, where there was no visual/olfactory evidence of contamination.

No further investigative or remedial actions are recommended for Site 12.

Soil excavated from Site 12 was transported to Riverbend Landfill.

11.0 VEHICLE HOIST (Site 13)

Soil was excavated to 12 feet bgs in the vicinity of the vehicle hoist (Figure 2). There was no visual/olfactory evidence of contamination surrounding the hoist. Sample 13-1-HST was collected from petroleum-contaminated soil observed inside the hoist (approximately one foot in diameter) and analyzed for TPH-HCID and PCBs. Confirmation soil sample 13-1-12.0' was collected at the excavation bottom beneath the hoist, and sample 13-1-SP1 was collected from the excavated soil. Groundwater was not encountered during excavation activities.

11.1 Analytical Results

Gasoline and lube oil were detected in sample 13-1-HST at 6.7 and 7,600 mg/kg, respectively, and one PCB isomer (Aroclor 1260) was detected at 0.22 mg/kg. Petroleum-contaminated soil within the hoist was disposed of at Riverbend Landfill. Petroleum hydrocarbons were not detected by NWTPH-HCID analysis in samples 13-1-12.0' or 13-1-SP1; therefore, PCB analysis of these samples was not required and the excavated soil was transported to Brown's Island Landfill.

No further investigation or remediation is recommended for Site 13.

12.0 WELL DECOMMISSIONING (Site 17)

One test well and two monitoring wells were installed to conduct a groundwater pumping test as part of initial construction design efforts (Figure 2). The test well was eight inches in diameter and 60 feet deep, and the two monitoring wells were two inches in diameter and 40 feet deep. After the pumping test, all three wells were decommissioned on August 29, 1997 by Geo-Tech Explorations, Inc. by filling them with grout according to state requirements. The test well's steel casing was grouted up to approximately 13 feet bgs, and the casing from 13 feet bgs to ground surface will be removed during the construction phase of Courthouse Square redevelopment.

13.0 DISPOSAL SUMMARY

Table C summarizes the quantities of impacted and non-impacted soil from each site which were disposed of at off-site landfills. The volume of groundwater pumped from the two excavations and treated on-site is also presented in Table C.

13.1 Soil

As shown in Table C, 2,447 tons of petroleum impacted soil were excavated from the subject sites at Courthouse Square and transported to the USA Waste-Riverbend landfill facility in McMinville, Oregon.

Approximately 4,062 cubic yards of non-impacted overburden soil were excavated from the subject sites at Courthouse Square and transported to Marion County's Brown's Island landfill facility in Salem, Oregon.

Copies of the transportation/disposal tickets are included as Appendix C.

13.2 Water

Approximately 36,000 gallons of groundwater was removed from excavations and treated on-site, as summarized in Table C. The sample of treated water collected prior to stormwater discharge was in compliance with the NPDES permit requirements, as shown in Table 6. The NPDES discharge reporting form and associated laboratory data are presented in Appendix D (note that the December 1997 NPDES reporting form includes discharges from other Courthouse Square activities).

Table D summarizes UST decommissioning activities on the subject site. DEQ decommissioning forms are presented as Appendix E.

14.0 UST DECOMMISSIONING SUMMARY

TABLE C SOIL AND GROUNDWATER DISPOSAL SUMMARY COURTHOUSE SQUARE			
Site # (Fig. 2)	Soil Disposal		Groundwater Treatment/Disposal * (gallons)
	Impacted: to Riverbend Landfill (tons)	Non-Impacted: to Brown's Island Landfill (cubic yards)	
1.	0	408	0
3.	492	722	0
4.	0	0	0
5.	0	360	0
8.	1,308	2,320	19,000
9.	546	0	17,000
10.	0	0	0
11.	0	0	0
12.	101	0	0
13.	0	12	0
14.	0	240	0
17.	0	0	0
Total	2,447	4,062	36,000

* Reported water quantities treated on site
 Quantities from Site 2 (Lin) and Sites 6, 7, 15, 16 (Chevron) are not included

Site 3
One 4,000-gallon and two 2,000-gallon USTs from a historical gasoline station were decommissioned in-place. Soil beneath each tank showed low to non-detectable petroleum contamination at concentration below DEQ Level 2 cleanup standards, indicating that there was no significant release of product from the three tanks. Approximately 492 tons of petroleum

Site 1
Two 575-gallon USTs from a historical gasoline station were decommissioned in-place. Soil beneath each tank and the suspected dispensing/product piping area showed no detectable petroleum contamination, indicating that there was no significant release of product from the two tanks.

Based on field observations and laboratory data, Century West has prepared the following findings and conclusions:

Twelve sites were investigated for suspected subsurface contamination based on historical activities on the Courthouse Square block. Petroleum-contaminated soil was removed in a manner consistent with DEQ cleanup requirements. Other potential contaminants, such as solvents, metals, and PCBs, were not detected in soil confirmation samples collected at the subject sites. Groundwater was encountered at two of the subject sites, and post-excavation confirmation samples indicated that groundwater did not appear to be impacted beyond the excavation limits.

15.0 SITE FINDINGS AND CONCLUSIONS

TABLE D UST DECOMMISSIONING SUMMARY COURTHOUSE SQUARE						
Site #	UST ID	UST Capacity (gallons)	Depth to Tank Top/Bottom (feet bgs)	Decommissioning Method	Impacted Soil (from UST)	
1	UST5	575	5.5/9.0	In-place	No	No
	UST6	575	5.5/9.0	In-place	No	No
	UST1	4,000	3.5/9.5	In-place	No	No
3	UST2	2,000	3.5/7.5	In-place	No	No
	UST3	2,000	4.0/9.0	In-place	No	No
	UST4	250	0.5/4.0	Removal	No	No
8	UST8	1,000	2.0/6.0	Removal	No	No

contaminated soil was removed from the suspected dispensing/product piping area, and the confirmation sample indicated that the extent of excavation was sufficient to meet DEQ Level 2 cleanup standards.

Site 4

USTs were not found during the investigative excavation in the suspect area associated with the Senator Hotel Building's boilers.

Site 5

USTs were not found during the investigative excavation in the suspect area associated with historical auto repair activities in the east end of the Beri Building.

Site 8

One 250-gallon and one 1,000-gallon UST located near ground surface were decommissioned by removal. Soil beneath each tank showed no detectable petroleum contamination, indicating that there was no significant release of product from the two tanks. A brick-lined drywell did not appear to be used for wastes such as solvents, metals, or PCBs. Approximately 492 tons of diesel-range contaminated soil located between 10 and 18 feet bgs was removed and disposed off-site. Confirmation soil samples indicated that the horizontal and vertical extent of excavation was sufficient. Groundwater entered the excavation, and a water sample collected after the groundwater was purged and allowed to recharge indicated that groundwater was not impacted.

Site 9

Approximately 546 tons of diesel-range contaminated soil located between 10 and 18 feet bgs was removed and disposed off-site. Confirmation soil samples indicated that the horizontal and vertical extent of excavation was sufficient. Groundwater entered the excavation, and a water sample collected after the groundwater was purged and allowed to recharge indicated that groundwater was not impacted.

Site 10

Petroleum-contaminated soil was not found during the investigative excavation in the suspect area associated with a previously decommissioned UST adjacent to the west side of the Beri Building.

Site 11

Petroleum hydrocarbons, solvents, metals, and PCBs were not found in soil during the investigative excavation in the area suspected of being a drywell in the Senator parking lot. No physical evidence of a drywell was observed.

Site 12

Diesel-range soil contamination, but no solvents, metals, and PCBs, were found in soil during the investigative excavation in the area suspected of being a drywell at the northwest corner of the

former Goldberg property. No physical evidence of a drywell was observed, and the source may have been from historical use of USTs (including possible fill-pipe spills) in the vicinity which were previously decommissioned. Approximately 101 tons of diesel-range contaminated soil located between 10 and 15 feet bgs was removed and disposed off-site. Confirmation soil samples indicated that the horizontal and vertical extent of excavation was sufficient. Groundwater did not enter the excavation.

Site 13

Petroleum-contaminated soil was not found during the removal of a vehicle hoist. A small quantity of petroleum-contaminated soil (primarily lube oil) with trace concentrations of PCBs was found inside the hoist and was properly disposed of off site.

Site 14

USTs were not found during the investigative excavation in the suspect area associated with historical activities in the west side of the Senator parking lot.

Site 17

Three pumping test wells were decommissioned by grouting according to state requirements.

16.0 RECOMMENDATIONS

Based upon the conclusions of this investigation, Century West Engineering offers the following recommendations.

- No additional investigation or remediation is warranted at the 12 sites addressed in this document.
- Provide environmental oversight during planned excavation activities on the Courthouse Square block in the construction phase of site redevelopment to address potential/unknown subsurface contamination which has not been identified to date.
- Submit this report to the DEQ.

TABLES



TABLE 1 SOIL ANALYTICAL RESULTS SITE 1	
Sample Identification	NWTPH-HCID
1-1-SP	ND
1-2-SP	ND
1-3-SP	ND
1-4-10.0'	ND
1-5-12.0'	ND
1-UST5-1-10.0' (east)	ND
1-UST5-2-9.5' (west)	ND
1-UST6-1-10.0' (east)	ND
1-UST6-2-9.5' (west)	ND
ND	Not Detected
TPH	Total Petroleum Hydrocarbon
HCID	Hydrocarbon Identification

TABLE 2 SOIL ANALYTICAL RESULTS SITE 3									
Sample Identification	NWTPH- HCID	Gas	Diesel	Kerosene	Oil	VOCs (mg/kg)		PCBs (mg/kg)	
						NWTPH (mg/kg)		VOCs (mg/kg)	
3-USTI-1-10.5'	ND	--	--	--	--	--	--	--	--
3-USTI-2-10.0'	ND	--	--	--	--	--	--	--	--
3-UST2-1-9.5'	ND	--	--	--	--	--	--	--	--
3-UST2-2-9.0'	ND	--	--	--	--	--	--	--	--
3-UST3-1-10.0'	ND	--	--	--	--	--	--	--	--
3-UST3-2-9.5'	--	--	250	200	ND	--	--	--	--
3-UST3-3 (sludge)	Kerosene, Oil	--	ND	43,000	6,200	n-Butylbenzene - 170 Naphthalene - 770 1,2,4-Trimethylbenzene - 400 1,3,5-Trimethylbenzene - 81	<0.05	--	--
3-1-10.0'	ND	--	--	--	--	--	--	--	--
3-1-SP1	ND	--	--	--	--	--	--	--	--
3-2-SP1	ND	--	--	--	--	--	--	--	--
3-3-SP1	ND	--	--	--	--	--	--	--	--
3-1-SP2	Oil	--	ND	ND	196	--	--	--	--
3-2-SP2	ND	--	--	--	--	--	--	--	--
3-3-SP2	ND	--	--	--	--	--	--	--	--
3-1-SP3	ND	--	--	--	--	--	--	--	--
DEQ Action Level	NA	80	500	500	500	NA	NA	NA	NA
--	=	Not Analyzed							
NA	=	Not Applicable							
<	=	Less Than							
ND	=	Not Detected							
TPH	=	Total Petroleum Hydrocarbons							
HCID	=	Hydrocarbon Identification							
VOCs	=	Volatile Organic Compounds (Method 8260)							
PCBs	=	Polychlorinated Biphenyls (Method 8080)							
mg/kg	=	milligram per kilogram							

TABLE 3 SOIL ANALYTICAL RESULTS SITE 8 SOIL EXCAVATION									
Sample ID	HCID	NWTPH-D _x (mg/kg)		BTEX (µg/kg)	PAH (µg/kg)	DBQ Action Level			
		Diesel	Oil			B	T	E	X
8-4-15.0'	--	7,200	ND	<66	<130	200	300	A - 65	N - 125
8-5-18.0'	--	88	ND	--	--	--	--	--	--
8-6-15.0'	--	210	ND	<2	<2	<2	<2	--	--
8-7-15.0'	--	36	ND	--	--	--	--	--	--
8-8-15.0'	--	24	ND	--	--	--	--	--	--
8-9-15.0'	--	43	ND	--	--	--	--	--	--
8-11-18.0'	--	180	ND	<2	<2	10	26	--	--
8-12-15.0'	--	1,100	ND	<58	<116	<116	<116	N - 840	--
8-1-SP1	ND	--	--	--	--	--	--	--	--
8-1-SP2	ND	--	--	--	--	--	--	--	--
8-2-SP2	ND	--	--	--	--	--	--	--	--
8-1-SP3	ND	--	--	--	--	--	--	--	--
8-2-SP3	ND	--	--	--	--	--	--	--	--
8-3-SP3	ND	--	--	--	--	--	--	--	--
8-4-SP3	ND	--	--	--	--	--	--	--	--
8-1-SP4	ND	--	--	--	--	--	--	--	--
8-2-SP4	ND	--	--	--	--	--	--	--	--

less than
--
Not Analyzed
mg/kg
µg/kg
milligrams per kilogram
micrograms per kilogram
Hydrocarbon Identification
Total petroleum hydrocarbons as diesel
TPH-D_x
BTEX
PAH
Concentrations in Bold print exceed the appropriate DBQ action level

ND Not Detected
NA Not Available
A Available
N Naphthalene

TABLE 4 SOIL ANALYTICAL RESULTS SITE 9							
Sample Identification	NWT/PH-D _x (mg/kg)		BTEX (µg/kg)			PAH (µg/kg)	DEQ Action Level
	Diesel	Oil	B	T	E		
9-1-15.0'	380	ND	--	--	--	--	
9-2-16.0'	ND	ND	--	--	--	--	
9-3-18.0'	3,800	ND	<58	145	<116	297	ND
9-5-15.0'	70	ND	<3	<3	<3	<7	--
9-6-18.0'	170	ND	--	--	--	--	--
9-8-17.0'	150	ND	<3	<3	<3	9.6	--
9-9-13.0'	110	ND	--	--	--	--	--
9-10-14.0'	14,000	ND	<3	7.6	28	160	A - 110 N - 380
9-11-14.0'	88	ND	--	--	--	--	--
9-12-18.0'	500	ND	--	--	--	--	--
9-13-15.0'	3,200	ND	--	--	--	--	N - 260
DEQ Action Level	500	500	100	80,000	100,000	800,000	A - NA N - 30,000

less than
= Not Analyzed
= Not Detected
= Not Available
= NA
= BTEX, PAH
= Benzene, Toluene, Ethylbenzene, Xylenes (Method 8200)
= Polynuclear aromatic hydrocarbons (Method 8270-SIM)
= Acenaphthylene
= Naphthalene
= mg/kg
= milligrams per kilogram
= µg/kg
= micrograms per kilogram
= Only detected PAH constituents are listed
= Concentrations in Bold print exceed the appropriate DEQ action level.

**TABLE 6
NPDES DISCHARGE ANALYTICAL RESULTS**

Source/Sample ID	TPH-418.1 (mg/L)	Total BTEX (mg/L)	Benzene (mg/L)	pH
Site 8/BT1-5	<0.5	<0.004	<0.0005	8.5
Site 3, 6, 9/BT1-6	0.5	0.0019	<0.0005	8.8
NPDES Discharge Limit	1	0.25	0.025	6-9

< less than
 = National Pollutant Discharge Elimination System
 = BTEX Benzene, Toluene, Ethylbenzene, Xylenes
 = mg/L milligram per liter

**TABLE 5
SOIL ANALYTICAL RESULTS
SITE 12**

Sample ID	NWTPH- HCID	NWTPH (mg/kg)		Halogenated Solvents (µg/kg)	TCP Metals (mg/L)	PCBs (mg/kg)	DEQ Action Level
		Diesel	Oil				
12-1-12.0'	Diesel	470	230	Chloromethane - 3.7	Cadmium - <0.08 Chromium - <0.01 Lead - <0.15	<0.05	
12-2-12.0'	--	ND	180	--	--	--	
12-3-12.0'	--	46	180	--	--	--	
12-4-12.0'	--	ND	ND	--	--	--	
12-5-15.0'	--	ND	ND	--	--	--	
12-6-12.0'	--	ND	ND	--	--	--	
12-6-12.0'	NA	500	500	NA	Cadmium - 0.5 Chromium - 10 Lead - 2	0.08	

-- Not Analyzed
 = Not Available
 = ND Not Detected
 = Less Than
 = Total petroleum hydrocarbons
 = HCID Hydrocarbon Identification
 = TPH
 = PCBs Polychlorinated Biphenyls (Method 8080)
 = mg/kg milligram per kilogram
 = µg/kg microgram per kilogram
 = mg/L milligram per liter
 = Only detected halogenated solvents (Method 8010) are listed.

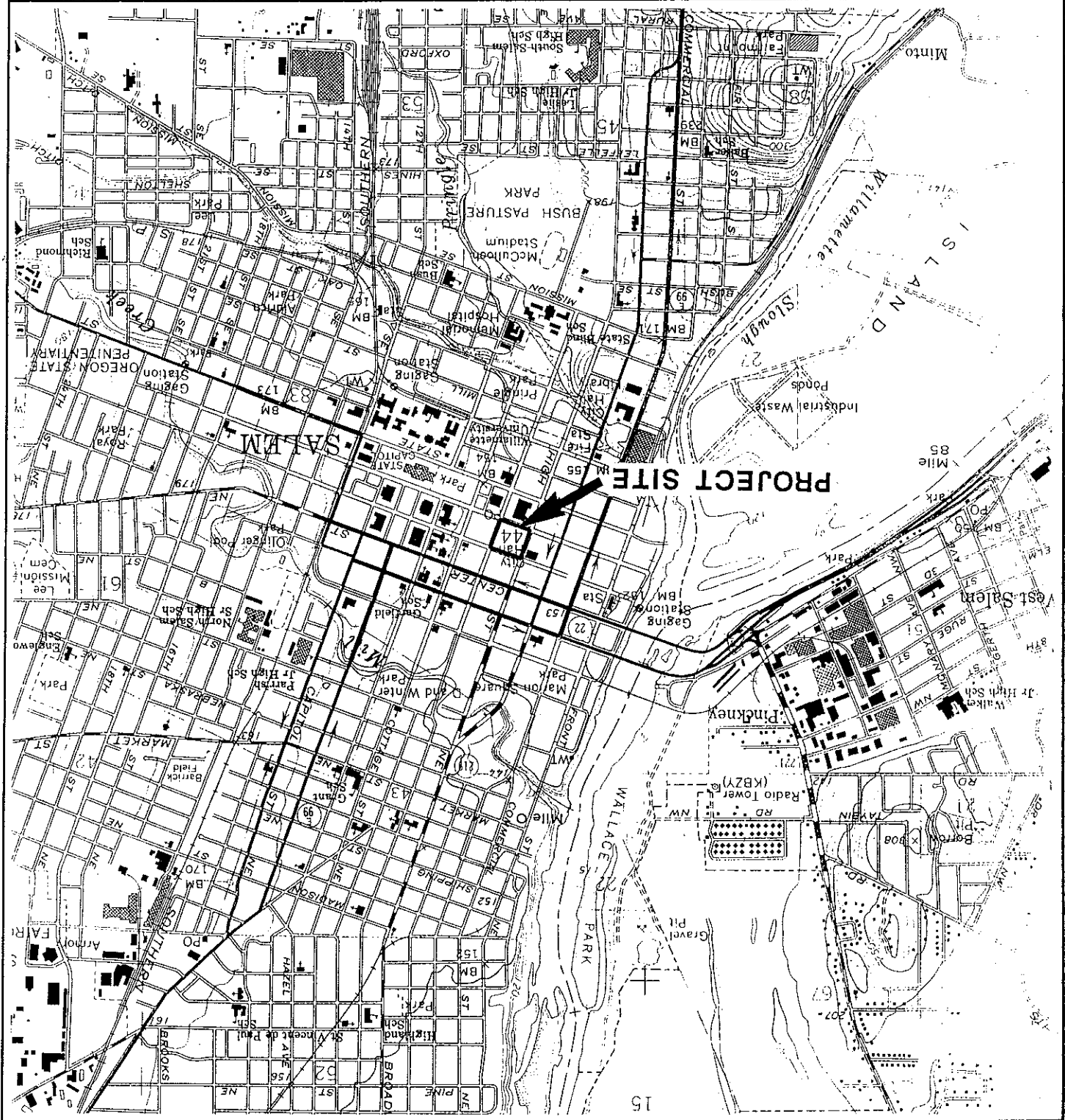
FIGURES



FIGURE: 1	centurywest ENGINEERING CORPORATION	SALEM, OREGON	FILE: 40806001\01\4006	
			DESIGNED BY: WR	CHECKED BY:
DATE: 11/96		VICINITY MAP	SCALE: AS SHOWN	DRAWN BY: DAK

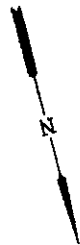
USGS SALEM WEST 7.5 MINUTE QUADRANGLE

1 1/2 0 1 MILE



SCALE IN FEET

0 25 50



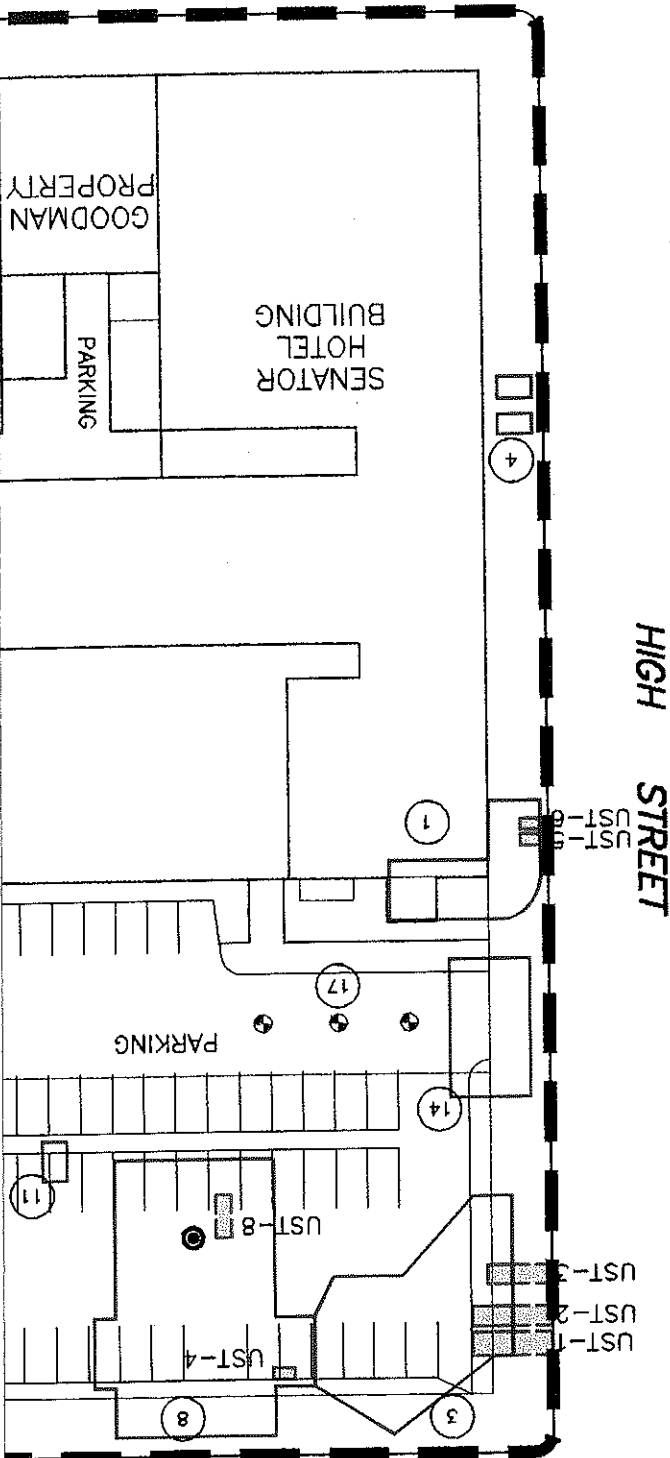
PRE-CONSTRUCTION REMEDIAL ACTIVITIES

2

FIGURE

LEGEND

- UNDERGROUND STORAGE TANK LOCATION
- PUMPING TEST/MONITORING WELLS
- RYWELL
- CONTENT OF SOIL EXCAVATION/INVESTIGATION
- IDENTIFICATION NUMBER
- ALL BUILDINGS AND FOUNDATIONS/BASEMENTS HAVE BEEN REMOVED



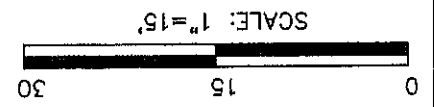
C

FILE: 40806001/19/6JF	
DESIGNED BY: TG	DRAWN BY: KFP
CHECKED BY: [Signature]	SCALE: AS SHOWN

SITE 1 MAP
 COURTHOUSE SQUARE
 SALEM, OREGON

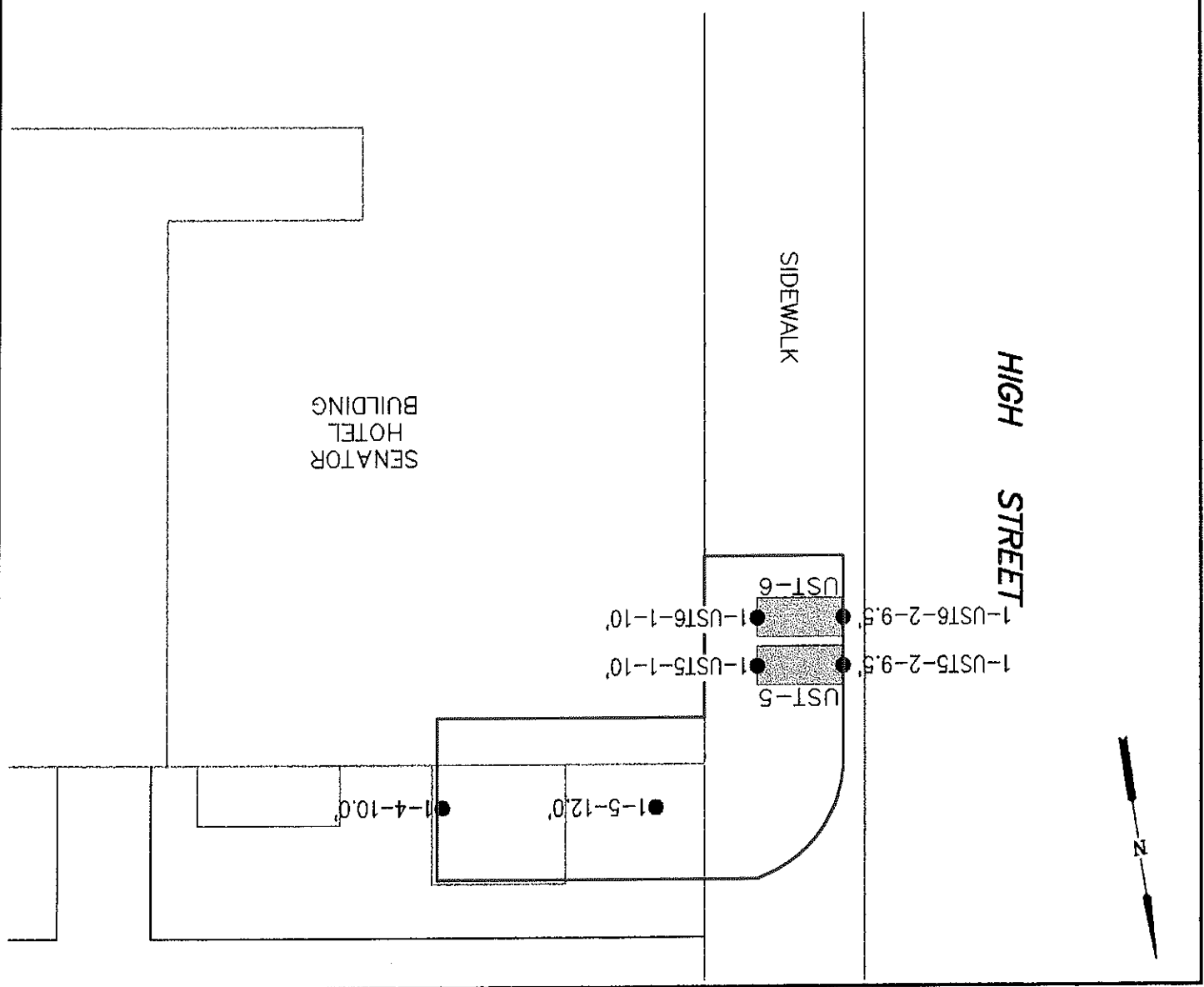
Centurywest
 ENGINEERING CORPORATION


FIGURE: 3
 DATE: 01/28/98

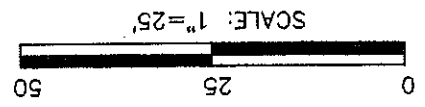


LEGEND






- 1-4-10.0' SOIL SAMPLE LOCATION AND IDENTIFICATION
- [Hatched Box] UNDERGROUND STORAGE TANK LOCATION
- [Oval] EXTENT OF SOIL EXCAVATION

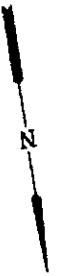
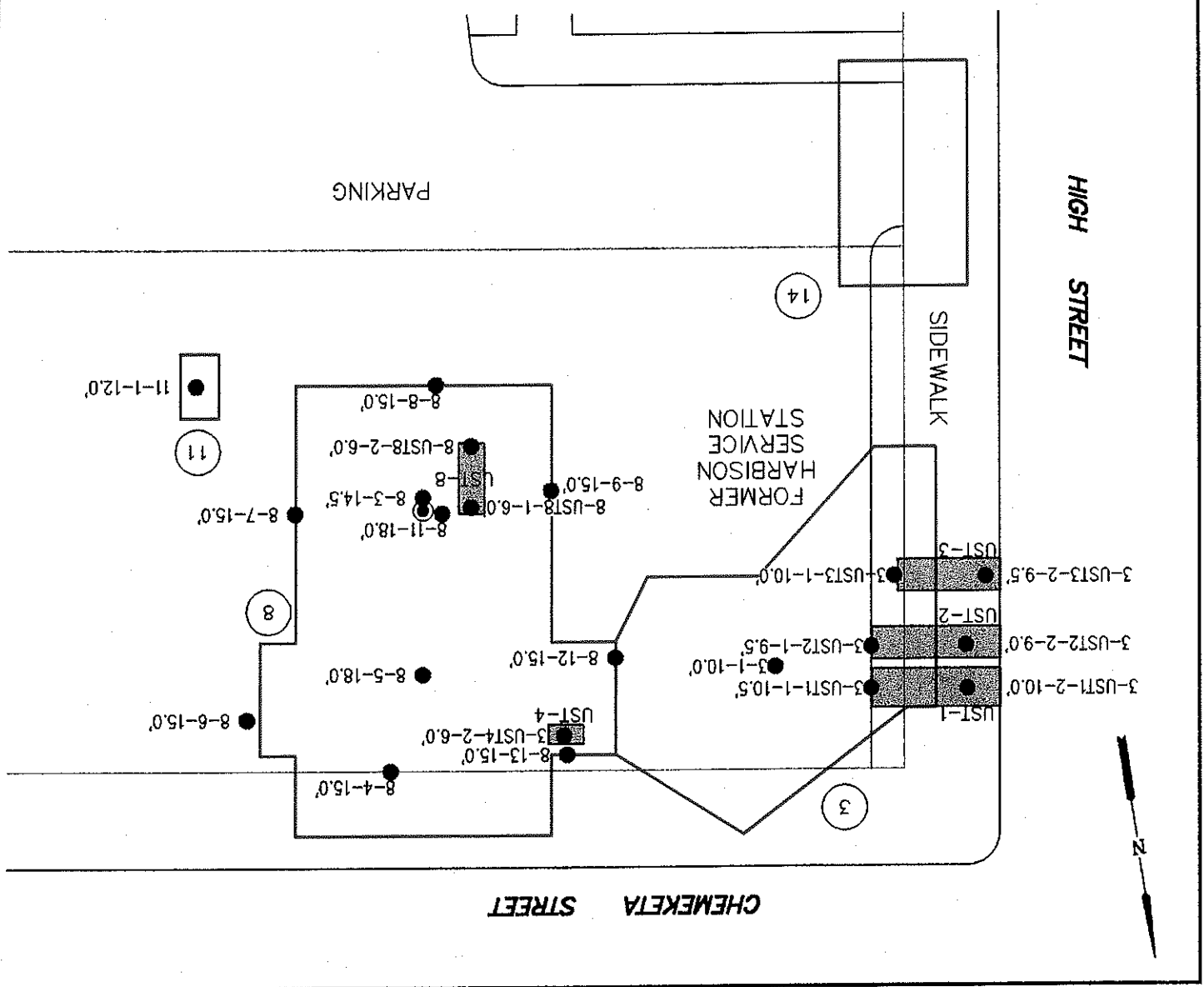


FILE: 40806001/19/6UE DRAWN BY: KFP SCALE: AS SHOWN	DESIGNED BY: TG CHECKED BY: <i>[Signature]</i>	SALEM, OREGON COURTHOUSE SQUARE SITES 3, 8, 11, & 14 MAP		 Centurywest ENGINEERING CORPORATION	DATE: 01/28/98 FIGURE: 4



LEGEND

-  UNDERGROUND STORAGE TANK LOCATION
-  SOIL SAMPLE LOCATION AND IDENTIFICATION
-  DRYWELL
-  EXTENT OF SOIL EXCAVATION
-  SITE IDENTIFICATION NUMBER

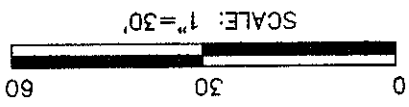


FILE: 40806001/19/6JJ	
DESIGNED BY: TG	CHECKED BY:
DRAWN BY: KFP	SCALE: AS SHOWN

SITES 5 AND 10 MAP
 COURTHOUSE SQUARE
 SALEM, OREGON

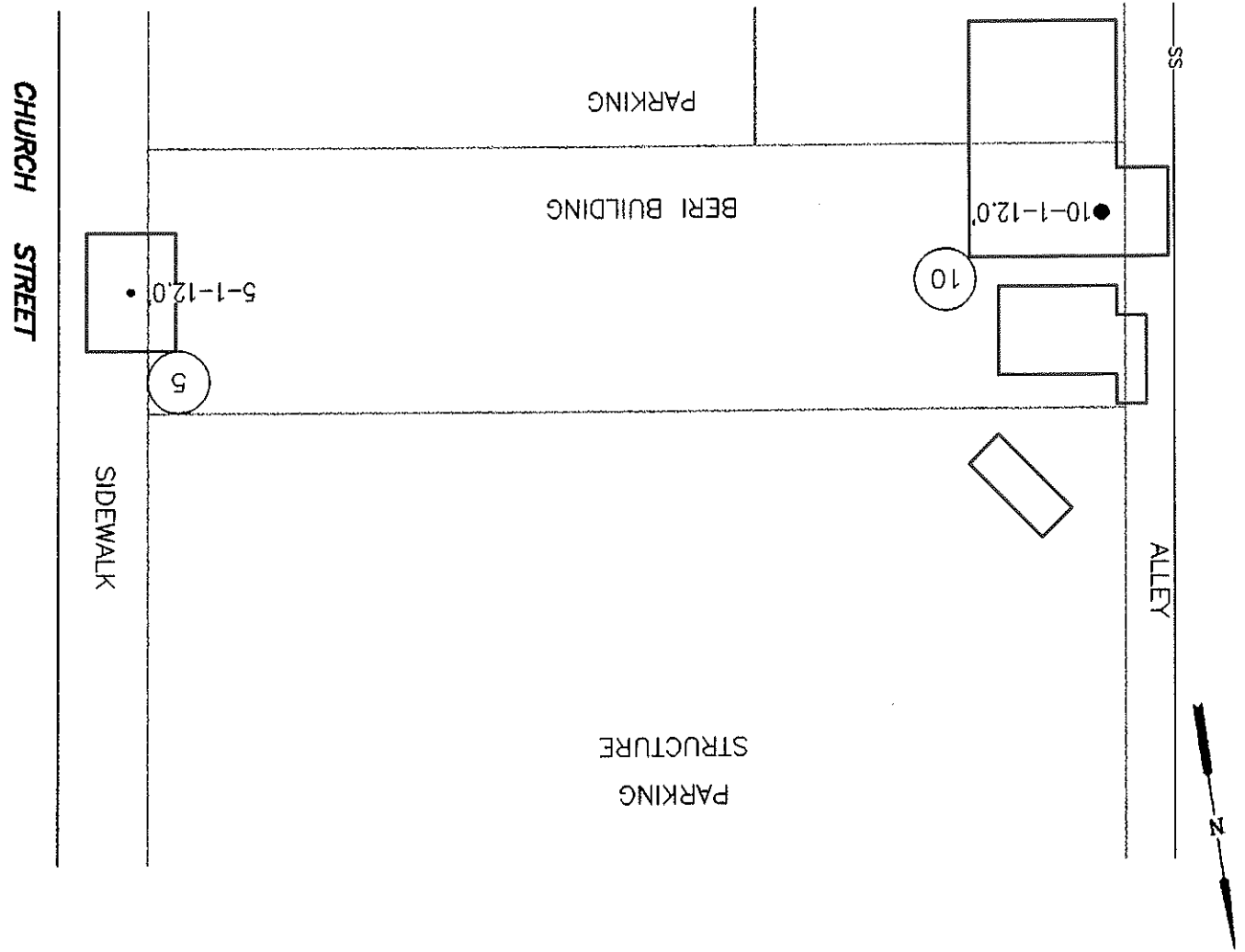
centurywest
 ENGINEERING CORPORATION

DATE: 01/28/98
 FIGURE: 5



LEGEND

- 5-1-12.0' SOIL SAMPLE LOCATION AND IDENTIFICATION
- SS— SANITARY SEWER PIPE
- EXTENT OF SOIL EXCAVATION
- 14 SITE IDENTIFICATION NUMBER



FILE: 40806001/19/6JM

DRAWN BY: KFP SCALE: AS SHOWN

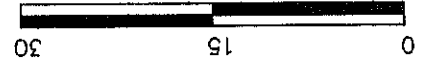
DESIGNED BY: TG CHECKED BY: [Signature]

SITE 9 MAP
COURTHOUSE SQUARE
SALEM, OREGON

centurywest
ENGINEERING CORPORATION

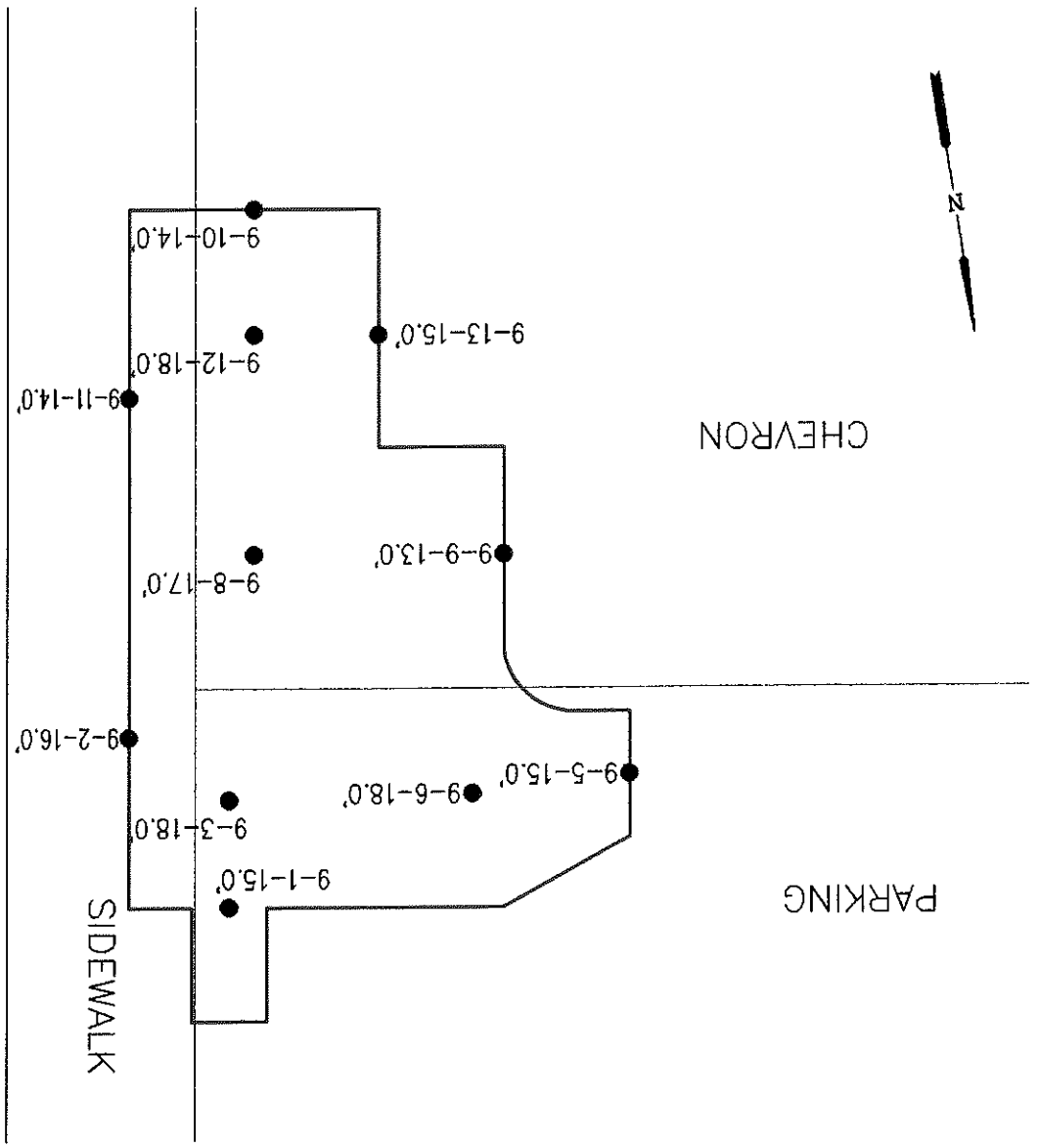
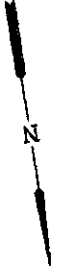
FIGURE: 6
DATE: 01/28/98

SCALE: 1"=15'



LEGEND

- 9-10-14.0' SOIL SAMPLE LOCATION AND IDENTIFICATION
- EXTENT OF SOIL EXCAVATION



FILE: 40806001/19/6JH

DRAWN BY: KFP SCALE: AS SHOWN

DESIGNED BY: TG CHECKED BY: *[Signature]*

SITE 12 MAP

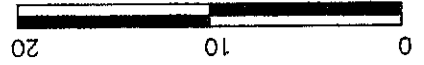
COURTHOUSE SQUARE
SALEM, OREGON



centurywest
ENGINEERING CORPORATION

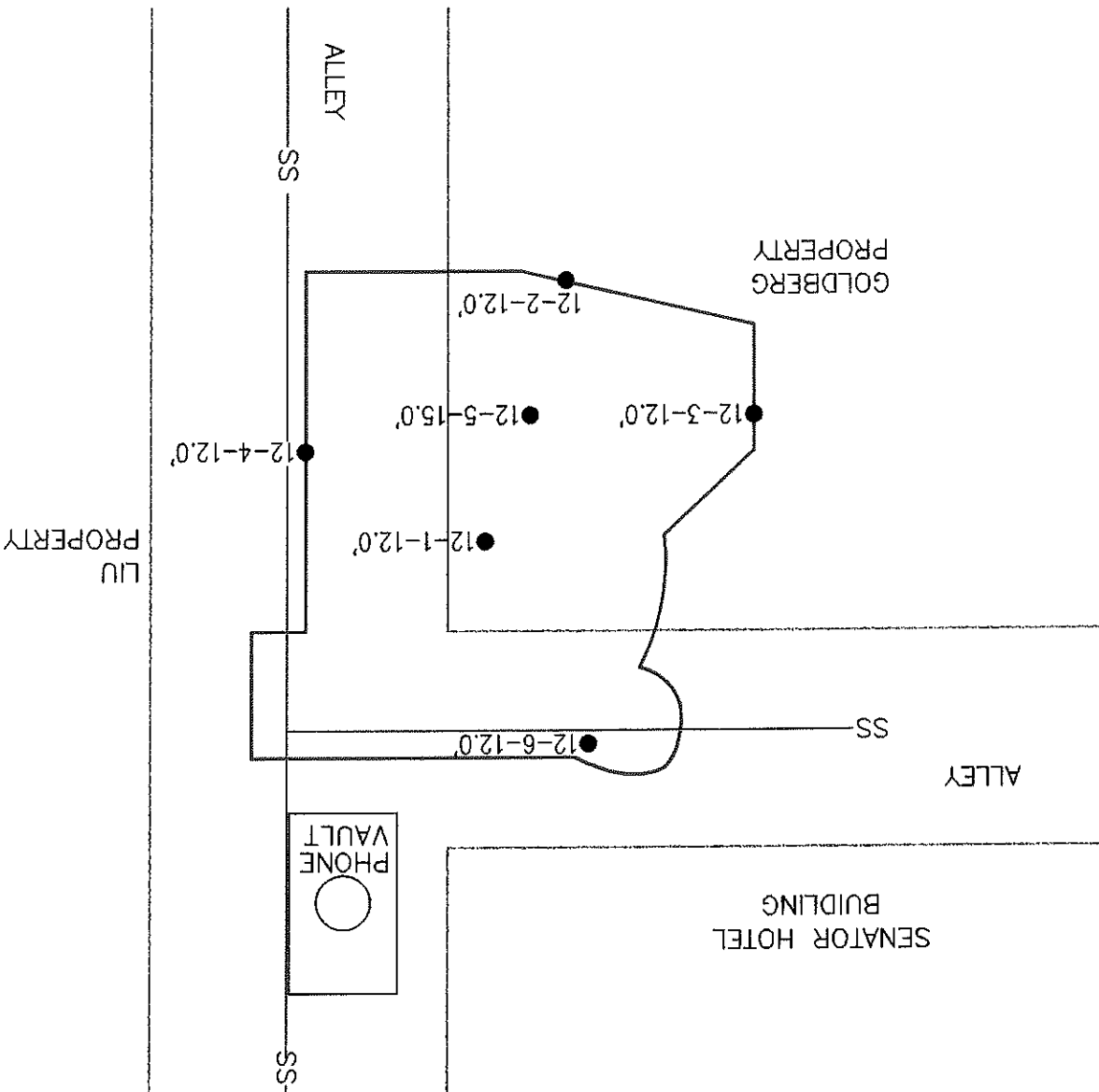
DATE: 01/28/98
FIGURE: 7

SCALE: 1"=10'



LEGEND

- 12-1-12.0' SOIL SAMPLE LOCATION AND IDENTIFICATION
- SS— SANITARY SEWER PIPE
- EXTENT OF SOIL EXCAVATION



APPENDICES



SITE PHOTOGRAPHS

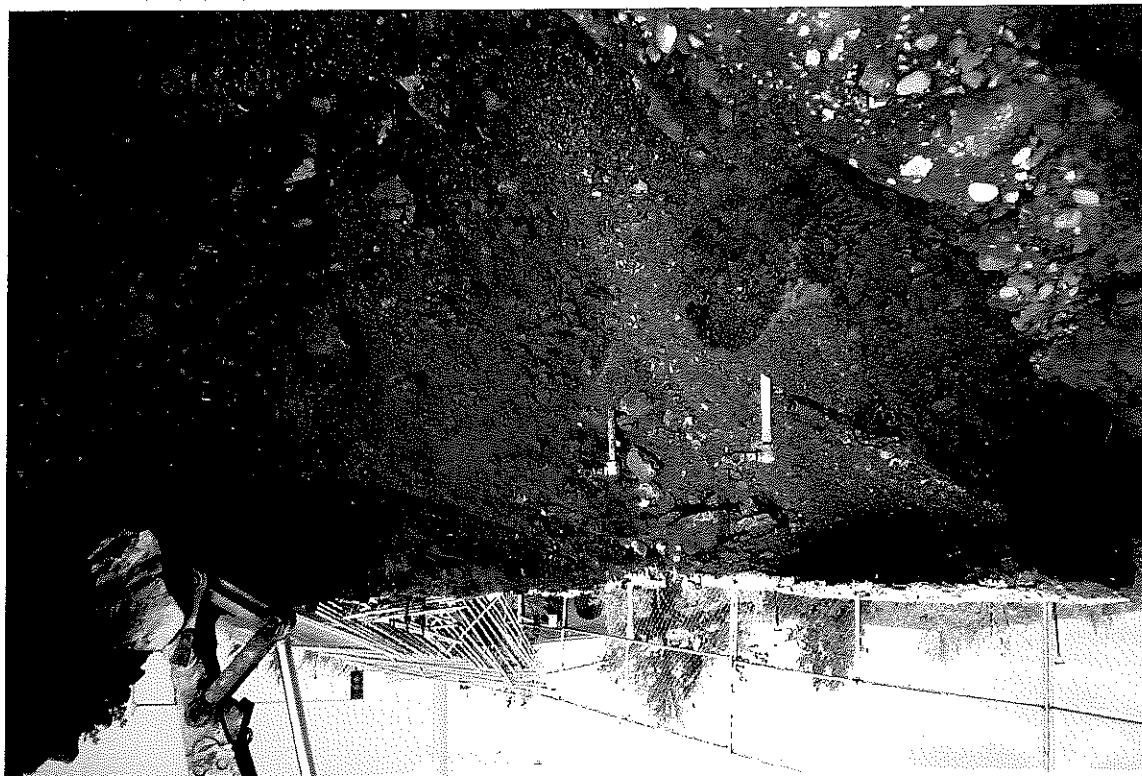
APPENDIX A



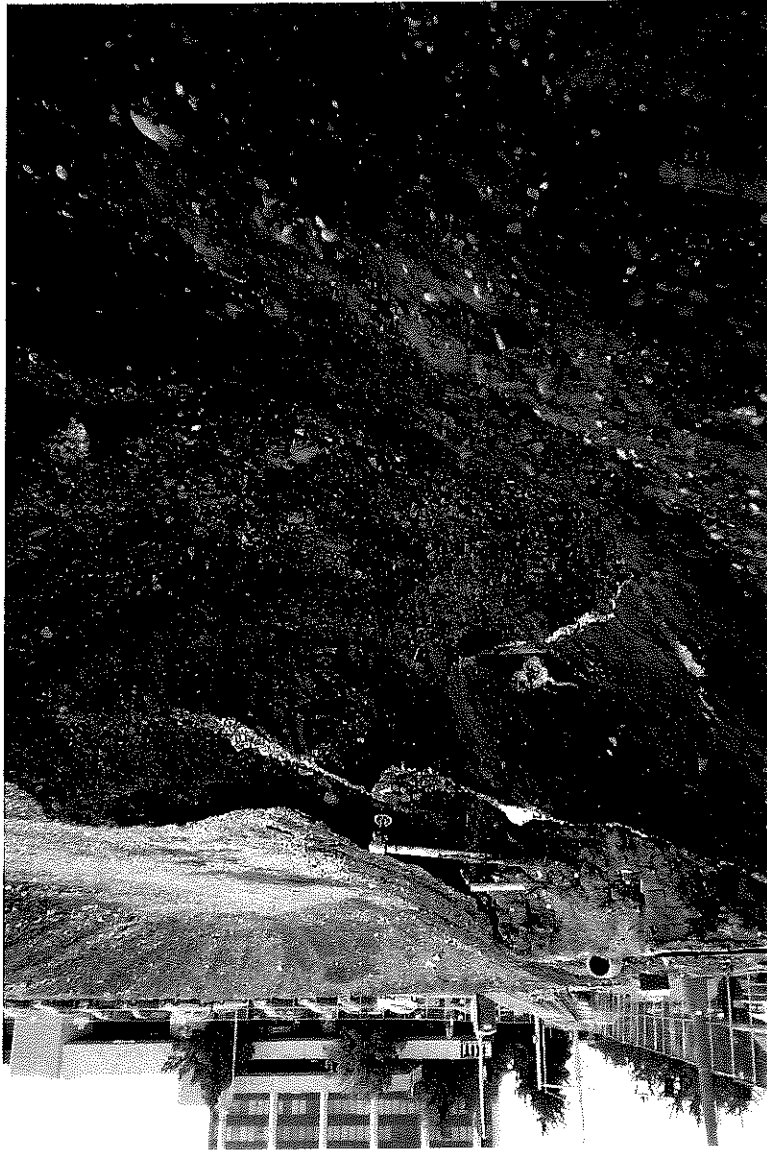
Photograph 2. Site 3 - USTs 1-3, looking northwest towards High Street.



Photograph 1. Site 1 - USTs 5-6, looking northwest toward High Street.



Photograph 3.
Site 4 - looking north.



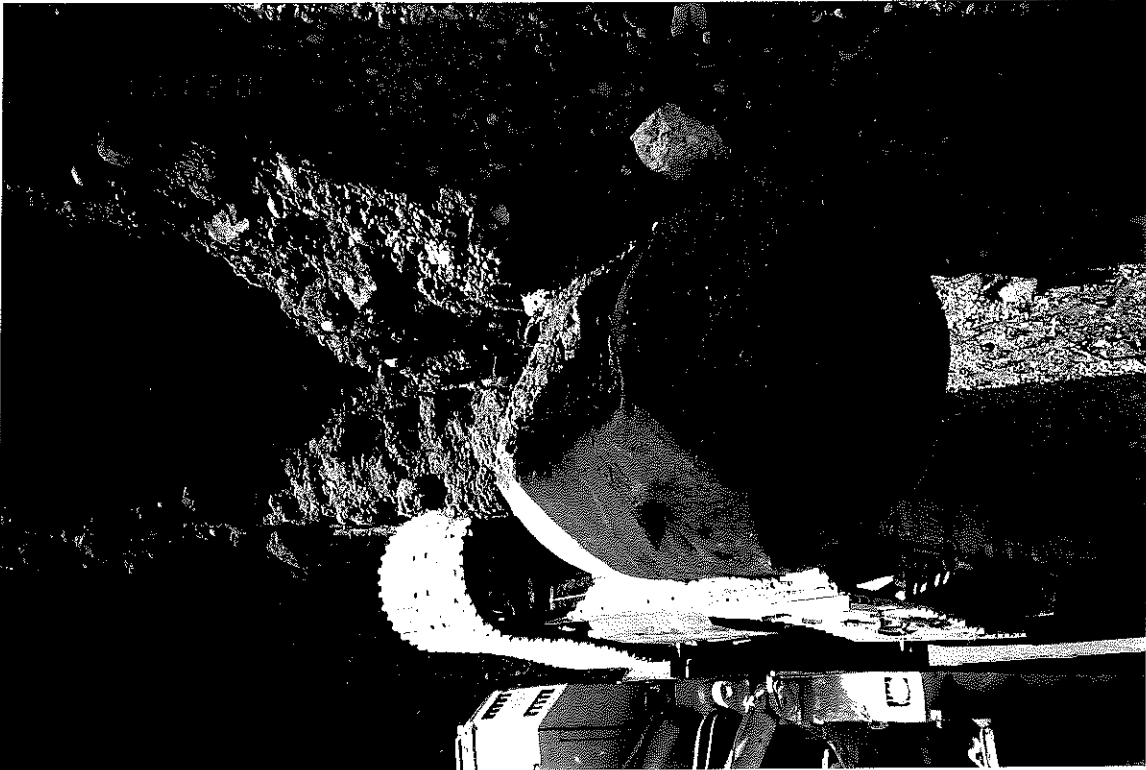
Photograph 5.

Site 8 - dry well.



Photograph 4.

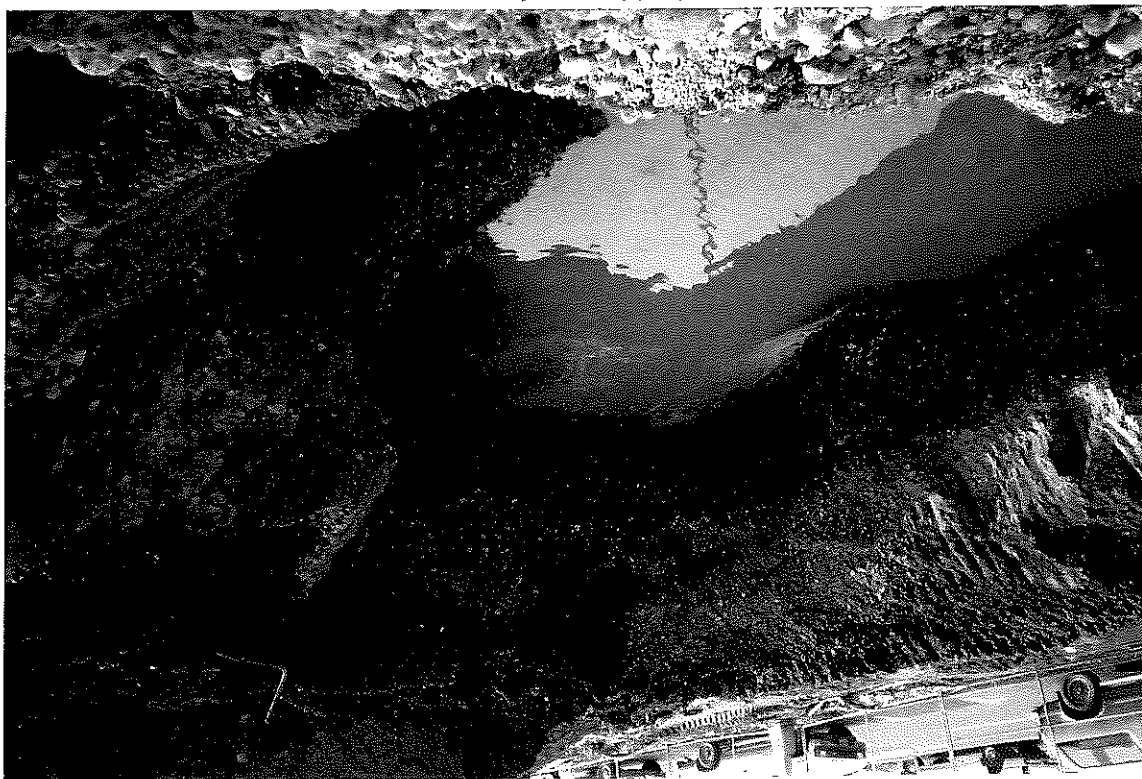
Site 8 - UST 4 after removal.



Photograph 6.
Site 8 - excavation along dry well.



Photograph 8.
Site 9 - looking southeast.



Photograph 7.
Site 8 - UST 8, looking north towards Chemeketa Street.



Photograph 10.

On-site water treatment system.



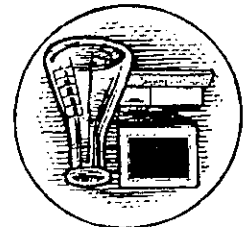
Photograph 9.

Site 12 - looking east with adjacent phone vault.



**LABORATORY REPORTS AND
CHAIN OF CUSTODY DOCUMENTATION**

APPENDIX B



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

December 02, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970267
Project No: 4080600119/4401

Project Name: Salem - Court House Square

The following sample was received on November 18, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

Lab I.D.	970267-1
Sample I.D.	12-1-12.0'
Matrix	Soil
Date Sampled	11/18/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 408060019/4401
 Project Name: Salem - Court House Square

Sample I.D. 12-1-12.0'
 Lab I.D. 970267-1
 Date Sampled 11/18/1997

Parameter	Method	Sample Results	Reporting Limit	Units	Date Analyzed	Flags
Total Solids	160.3	66	0.01	%	11/19/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/19/1997	
Dilution Factor		1			11/19/1997	
as Gasoline						
NWTPH-HCID	NWTPH-HCID	ND	30	mg/Kg dry wt	11/19/1997	
as Diesel						
NWTPH-HCID	NWTPH-HCID	ND	76	mg/Kg dry wt	11/19/1997	A3
as Lube Oil						
NWTPH-DX (soil)						
Extraction Date		1			11/21/1997	
Dilution Factor		470	23	mg/Kg dry wt	11/21/1997	
as Diesel						
NWTPH-DX	NWTPH-DX	230	76	mg/Kg dry wt	11/21/1997	
as Lube Oil						
TCLP Metals (3)						
TCLP Extraction					11/24/1997	
ICP Digestion		-			11/25/1997	
TCLP Cadmium, ICP		ND	0.08	mg/L	11/25/1997	
TCLP Chromium, ICP		ND	0.01	mg/L	11/25/1997	
TCLP Lead, ICP		ND	0.15	mg/L	11/25/1997	
Halogenated Solvents 8010 (soil)						
Dilution Factor		1			12/02/1997	
Bromodichloromethane		ND	2.0	µg/Kg	12/02/1997	
Bromoform		ND	2.0	µg/Kg	12/02/1997	
Bromomethane		ND	10	µg/Kg	12/02/1997	
Carbon Tetrachloride		ND	2.0	µg/Kg	12/02/1997	
Chlorobenzene		ND	2.0	µg/Kg	12/02/1997	
Chloroethane		ND	2.0	µg/Kg	12/02/1997	
2-Chloroethylvinyl ether		ND	70	µg/Kg	12/02/1997	
Chloroform		ND	2.0	µg/Kg	12/02/1997	
Chloromethane		3.7	2.0	µg/Kg	12/02/1997	
Dibromochloromethane		ND	2.0	µg/Kg	12/02/1997	
1,2-Dichlorobenzene		ND	2.0	µg/Kg	12/02/1997	
1,3-Dichlorobenzene		ND	2.0	µg/Kg	12/02/1997	
1,4-Dichlorobenzene		ND	2.0	µg/Kg	12/02/1997	
Dichlorodifluoromethane		ND	2.0	µg/Kg	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

Sample I.D. 12-1-12.0'
 Lab I.D. 970267-1
 Date Sampled 11/18/1997

Parameter	Method	Sample Results	Limit Reporting	Units	Date Analyzed	Flags
8010 cont						
1,1-Dichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
1,2-Dichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
cis-1,2-Dichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
trans-1,2-Dichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
1,2-Dichloropropane	8010	ND	2.0	µg/kg	12/02/1997	
cis-1,3-Dichloropropene	8010	ND	2.0	µg/kg	12/02/1997	
trans-1,3-Dichloropropene	8010	ND	2.0	µg/kg	12/02/1997	
Freon 113	8010	ND	22	µg/kg	12/02/1997	
Methylene Chloride	8010	ND	10	µg/kg	12/02/1997	
Ethylene dibromide	8010	ND	2.0	µg/kg	12/02/1997	
1,1,2,2-Tetrachloroethane	8010	ND	2.0	µg/kg	12/02/1997	
Tetrachloroethene	8010	ND	2.0	µg/kg	12/02/1997	
1,1,1-Trichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
1,1,2-Trichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
Trichloroethene	8010	ND	2.0	µg/kg	12/02/1997	
Trichlorofluoromethane	8010	ND	2.0	µg/kg	12/02/1997	
Vinyl chloride	8010	ND	2.0	µg/kg	12/02/1997	
PCB 8080 (soil)						
Extraction Date					11/25/1997	
Dilution Factor		1			12/01/1997	
Aroclor 1016	8080	ND	0.05	mg/kg	12/01/1997	
Aroclor 1221	8080	ND	0.05	mg/kg	12/01/1997	
Aroclor 1232	8080	ND	0.05	mg/kg	12/01/1997	
Aroclor 1242	8080	ND	0.05	mg/kg	12/01/1997	
Aroclor 1248	8080	ND	0.05	mg/kg	12/01/1997	
Aroclor 1254	8080	ND	0.05	mg/kg	12/01/1997	
Aroclor 1260	8080	ND	0.05	mg/kg	12/01/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

Parameter	Method	Sample Results	Limit Reporting	Units	Date Analyzed	Flags
NWTFPH-HCID (soil)	NWTFPH-HCID	ND	20	mg/kg	11/19/1997	
as Gasoline						
as Diesel						
NWTFPH-HCID	NWTFPH-HCID	ND	50	mg/kg	11/19/1997	
as Lube Oil						
NWTFPH-Dx (soil)	NWTFPH-Dx	ND	100	mg/kg	11/19/1997	
as Diesel						
as Lube Oil						
NWTFPH-Dx	NWTFPH-Dx	ND	25	mg/kg	11/21/1997	
as Diesel						
as Lube Oil						
TCLP Metals (3)						
TCLP Cadmium, ICP		ND	0.08	mg/L	11/25/1997	
TCLP Chromium, ICP		ND	0.01	mg/L	11/25/1997	
TCLP Lead, ICP		ND	0.15	mg/L	11/25/1997	
Halogenated Solvents 8010 (soil)						
Bromodichloromethane	8010	ND	2.0	µg/kg	12/02/1997	
Bromoform	8010	ND	2.0	µg/kg	12/02/1997	
Bromomethane	8010	ND	10	µg/kg	12/02/1997	
Carbon Tetrachloride	8010	ND	2.0	µg/kg	12/02/1997	
Chlorobenzene	8010	ND	2.0	µg/kg	12/02/1997	
Chloroethane	8010	ND	2.0	µg/kg	12/02/1997	
2-Chloroethylvinyl ether	8010	ND	5.0	µg/kg	12/02/1997	
Chloroform	8010	ND	2.0	µg/kg	12/02/1997	
Dibromochloromethane	8010	ND	2.0	µg/kg	12/02/1997	
1,2-Dichlorobenzene	8010	ND	2.0	µg/kg	12/02/1997	
1,3-Dichlorobenzene	8010	ND	2.0	µg/kg	12/02/1997	
1,4-Dichlorobenzene	8010	ND	2.0	µg/kg	11/02/1997	
Dichlorodifluoromethane	8010	ND	2.0	µg/kg	12/02/1997	
1,1-Dichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
1,2-Dichloroethane	8010	ND	2.0	µg/kg	12/02/1997	
1,1-Dichloroethene	8010	ND	2.0	µg/kg	12/02/1997	
trans-1,2-Dichloroethene	8010	ND	2.0	µg/kg	12/02/1997	
cis-1,2-Dichloroethene	8010	ND	2.0	µg/kg	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8010 con't						
1,2-Dichloropropane	8010	ND	2.0	µg/Kg	12/02/1997	
cis-1,3-Dichloropropene	8010	ND	2.0	µg/Kg	12/02/1997	
trans-1,3-Dichloropropene	8010	ND	2.0	µg/Kg	12/02/1997	
Freon 113	8010	ND	22	µg/Kg	12/02/1997	
Methylene Chloride	8010	ND	10	µg/Kg	12/02/1997	
Ethylene dibromide	8010	ND	2.0	µg/Kg	12/02/1997	
1,1,2,2-Tetrachloroethane	8010	ND	2.0	µg/Kg	12/02/1997	
Tetrachloroethene	8010	ND	2.0	µg/Kg	12/02/1997	
1,1,1-Trichloroethane	8010	ND	2.0	µg/Kg	12/02/1997	
1,1,2-Trichloroethane	8010	ND	2.0	µg/Kg	12/02/1997	
Trichloroethene	8010	ND	2.0	µg/Kg	12/02/1997	
Trichlorofluoromethane	8010	ND	2.0	µg/Kg	12/02/1997	
Vinyl chloride	8010	ND	2.0	µg/Kg	12/02/1997	
PCB 8080 (soil)						
Aroclor 1016	8080	ND	0.05	mg/Kg	12/01/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	12/01/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	12/01/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	12/01/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	12/01/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	12/01/1997	
Aroclor 1260	8080	ND	0.05	mg/Kg	12/01/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

Sample I.D.

12-1-12.0'

Lab I.D.

970267-1

Bromofluorobenzene (Surr.)	NWTPH-HCID	104 %	11/19/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	110 %	11/19/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	110 %	11/21/1997
1,4-Dichlorobutane (Surr.)	8010	99 %	12/02/1997
Decachlorobiphenyl (Surr.)	8080	106 %	12/01/1997
Tetrachlorometaxylene (Surr.)	8080	100 %	12/01/1997

Sample I.D.

Method Blank

Bromofluorobenzene (Surr.)	NWTPH-HCID	102 %	11/19/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	101 %	11/19/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	99 %	11/21/1997
1,4-Dichlorobutane (Surr.)	8010	100 %	12/02/1997
Decachlorobiphenyl (Surr.)	8080	112 %	12/01/1997
Tetrachlorometaxylene (Surr.)	8080	122 %	12/01/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	1,014	1,004	99.1	mg/Kg	11/21/1997	
as Lube Oil	510.3	585.2	114.7	mg/Kg	11/21/1997	
Halogenated Solvents 8010 (soil)						
Bromodichloromethane	60.0	57.9	96.5	µg/Kg	12/02/1997	
Bromoform	60.0	60.5	100.8	µg/Kg	12/02/1997	
Bromomethane	60.0	53.3	88.8	µg/Kg	12/02/1997	
Carbon Tetrachloride	60.0	58.6	97.7	µg/Kg	12/02/1997	
Chlorobenzene	60.0	59.8	99.7	µg/Kg	12/02/1997	
Chloroethane	60.0	59.3	98.8	µg/Kg	12/02/1997	
2-Chloroethylvinyl ether	60.0	47.5	79.2	µg/Kg	12/02/1997	
Chloroform	60.0	59.4	99.0	µg/Kg	12/02/1997	
Chloromethane	60.0	55.8	93.0	µg/Kg	12/02/1997	
Dibromochloromethane	60.0	59.1	98.5	µg/Kg	12/02/1997	
1,2-Dichlorobenzene	60.0	59.3	98.8	µg/Kg	12/02/1997	
1,3-Dichlorobenzene	60.0	60.3	100.5	µg/Kg	12/02/1997	
1,4-Dichlorobenzene	60.0	58.9	98.2	µg/Kg	12/02/1997	
Dichlorodifluoromethane	60.0	55.9	93.2	µg/Kg	12/02/1997	
1,1-Dichloroethane	60.0	59.5	99.2	µg/Kg	12/02/1997	
1,2-Dichloroethane	60.0	58.5	97.5	µg/Kg	12/02/1997	
1,1-Dichloroethene	60.0	59.1	98.5	µg/Kg	12/02/1997	
cis-1,2-Dichloroethene	60.0	59.9	99.8	µg/Kg	12/02/1997	
trans-1,2-Dichloroethene	60.0	61.3	102.2	µg/Kg	12/02/1997	
1,2-Dichloropropane	60.0	59.5	99.2	µg/Kg	12/02/1997	
cis-1,3-Dichloropropene	60.0	54.9	91.5	µg/Kg	12/02/1997	
trans-1,3-Dichloropropene	60.0	52.8	88.0	µg/Kg	12/02/1997	
Freon 113	60.0	65.4	109.0	µg/Kg	12/02/1997	
Methylene Chloride	60.0	63.3	105.5	µg/Kg	12/02/1997	
Ethylene dibromide	60.0	62.1	103.5	µg/Kg	12/02/1997	
1,1,2,2-Tetrachloroethane	60.0	57.7	96.2	µg/Kg	12/02/1997	
Tetrachloroethene	60.0	56.7	94.5	µg/Kg	12/02/1997	
1,1,1-Trichloroethane	60.0	57.9	96.5	µg/Kg	12/02/1997	
1,1,2-Trichloroethane	60.0	56.0	93.3	µg/Kg	12/02/1997	
Trichloroethene	60.0	58.7	97.8	µg/Kg	12/02/1997	
Trichlorofluoromethane	60.0	57.7	96.2	µg/Kg	12/02/1997	
Vinyl chloride	60.0	58.1	96.8	µg/Kg	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
TCLP Metals									
TCLP-Cadmium	1.00	ND	0.99	99.0	--	--	--	11/25/1997	
TCLP-Chromium	5.00	ND	4.50	89.0	--	--	--	11/25/1997	
TCLP-Lead	5.00	ND	5.58	95.0	--	--	--	11/25/1997	
Halogenated Solvents									
Chlorobenzene	60.0	ND	59.7	99.5	57.8	96.3	3.3	12/02/1997	
1,1-Dichloroethene	60.0	ND	58.2	97.0	61.2	102.0	4.9	12/02/1997	
Trichloroethene	60.0	ND	53.8	89.7	62.4	104.0	14.7	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWPH-Dx (soil)								
as Diesel	170.0	162.8	95.8	--	--	--	11/21/1997	
as Lube Oil	170.0	195.7	115.1	--	--	--	11/21/1997	
PCB's 8080								
Aroclor 1254	0.479	0.489	102.0	0.466	101.0	1.0	12/01/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970267
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

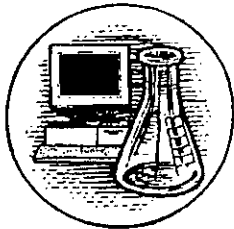
DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	11/19/1997	
as Diesel	ND	ND		mg/Kg	11/19/1997	
as Lube Oil	ND	ND		mg/Kg	11/19/1997	
NWTPH-Dx (soil)						
as Diesel	ND	ND		mg/Kg	11/21/1997	
as Lube Oil	ND	ND		mg/Kg	11/21/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation.

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

19761 S.W. 95th Place
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Fax (503) 612-8572

October 24, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970181
Project No: 4080600119
Project Name: Salem - Court House Square

The following samples were received on October 20, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970181-1	1-1-SP	Soil	10/20/1997
970181-2	1-2-SP	Soil	10/20/1997
970181-3	1-3-SP	Soil	10/20/1997
970181-4	3-1-SP1	Soil	10/20/1997
970181-5	3-2-SP1	Soil	10/20/1997
970181-6	3-3-SP1	Soil	10/20/1997
970181-7	3-1-SP2	Soil	10/20/1997
970181-8	3-2-SP2	Soil	10/20/1997
970181-9	3-3-SP2	Soil	10/20/1997
970181-10	4-1-SP	Soil	10/20/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-1-SP	970181-1	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	83	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	10/21/1997	
as Diesel	NWTPH-HCID	ND	60	mg/Kg dry wt	10/21/1997	
as Lube Oil	NWTPH-HCID	ND	120	mg/Kg dry wt	10/21/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-2-SP	970181-2	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/21/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	10/21/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	10/21/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-3-SP	970181-3	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	88	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/21/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	10/21/1997	
as Lube Oil	NWTPH-HCID	ND	114	mg/Kg dry wt	10/21/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-1-SP1	970181-4	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	91	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	10/21/1997	
as Diesel	NWTPH-HCID	ND	55	mg/Kg dry wt	10/21/1997	
as Lube Oil	NWTPH-HCID	ND	110	mg/Kg dry wt	10/21/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-2-SP1	970181-5	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	89	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	56	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	112	mg/Kg dry wt	10/22/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-3-SP1	970181-6	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	83	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	60	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	120	mg/Kg dry wt	10/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-1-SP2	970181-7	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	59	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	OIL	118	mg/Kg dry wt	10/22/1997	
NWTPH-Dx (soil)						
Extraction Date		-			10/23/1997	
Dilution Factor		1			10/23/1997	
as Diesel	NWTPH-Dx	ND	18	mg/Kg dry wt	10/23/1997	A3
as Lube Oil	NWTPH-Dx	196	59	mg/Kg dry wt	10/23/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-2-SP2	970181-8	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	10/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-3-SP2	970181-9	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	10/22/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
4-1-SP	970181-10	10/20/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	84	0.01	%	10/21/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	60	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	119	mg/Kg dry wt	10/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970181
Project No: 4080600119
Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	10/22/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	10/22/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	10/23/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	10/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-1-SP	970181-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	94 %	10/21/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	94 %	10/21/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-2-SP	970181-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	94 %	10/21/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	95 %	10/21/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-3-SP	970181-3		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	73 %	10/21/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	74 %	10/21/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-1-SP1	970181-4		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	116 %	10/21/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	118 %	10/21/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-2-SP1	970181-5		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	146 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	148 %	10/22/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-3-SP1	970181-6		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	95 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	97 %	10/22/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-1-SP2	970181-7		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	97 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	98 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	105 %	10/23/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-2-SP2	970181-8		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	97 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	99 %	10/22/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-3-SP2	970181-9		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	95 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	97 %	10/22/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
4-1-SP	970181-10		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	98 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	101 %	10/22/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970181
Project No: 4080600119
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

Sample I.D.

Method Blank

Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	90 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	91 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	108 %	10/23/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	1,014	1,100	108.5	mg/Kg	10/23/1997	
as Lube Oil	510.3	481.5	94.4	mg/Kg	10/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970181
 Project No: 4080600119
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)								
as Diesel	170.0	223.7	131.6	--	--	--	10/23/1997	L
as Lube Oil	170.0	180.4	106.1	---	---	---	10/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970186
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	10/21/1997	
as Diesel	ND	ND		mg/Kg	10/21/1997	
as Lube Oil	ND	ND		mg/Kg	10/21/1997	
NWTPH-Dx (soil)						
as Diesel	ND	ND		mg/Kg	10/23/1997	
as Lube Oil	196	109	57.0	mg/Kg	10/23/1997	R

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

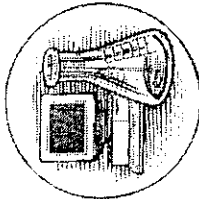
Specialty Analytical, An Oregon Corporation

CHAIN OF CUSTODY RECORD

Specialty Analytical
 19761 S.W. 95th Place
 Tualatin, OR 97062
 (503) 612-9007 - Phone
 (503) 612-8572 - Fax

Contact Person/Project Manager TOM GAINER
 Company CENTURY WEST ENGINEERING
 Address 825 NE Multnomah, Suite 425

Phone 503-231-6078 Fax 231-6482
 Project No. 4080600119 Project Name Salem Court House Square
 Invoice To _____ P.O. No. _____



Collected By: Augner Saul
 Signature: _____
 Printed: AUGNER SAUL

Signature _____
 Printed _____

Turn Around Time _____
 Normal
 Rush _____
 Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	For Laboratory Use	
						Comments	Lab I.D.
10/20/97	1420	1-1-SP	Soil	1		IF DETECT ON	-1
	1425	1-2-SP		1		HClD QUANT.	-2
	1630	1-3-SP		1			-3
	1300	3-1-SP1		1			-4
	1305	3-2-SP1		1			-5
	1402	3-3-SP1		1			-6
	1140	3-1-SP2		1	X		-7
	1642	3-2-SP2		1	X		-8
	1645	3-3-SP2		1	X		-9
	1245	4-1-SP		1	Y		-10
Relinquished By: <u>Augner Saul</u>						Relinquished By:	
Company: <u>CIVET</u>						Company:	
Date: <u>10/20/97</u>						Date:	
Time: <u>1800</u>						Time:	
Received For Lab By: <u>Andy Og</u>						Received For Lab By:	
Date: <u>10/20/97</u>						Date:	
Time: <u>18:00</u>						Time:	

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
 Copies: White-Original Yellow-Project File Pink-Customer Copy



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

October 22, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970186
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following samples were received on October 21, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970186-1	5-2-SP	Soil	10/21/1997
970186-2	5-3-SP	Soil	10/21/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970186
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

Sample I.D. Lab I.D. Date Sampled
 5-2-SP 970186-1 10/21/1997

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	10/22/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	10/22/1997	

Sample I.D. Lab I.D. Date Sampled
 5-3-SP 970186-2 10/21/1997

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	10/22/1997	
NWTPH-HCID (soil)						
Extraction Date					10/21/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/22/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	10/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970186
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	10/22/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	10/22/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	10/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970186
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
5-2-SP	970186-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	148 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	155 % SR	10/22/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
5-3-SP	970186-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	97 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	99 %	10/22/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	90 %	10/22/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	91 %	10/22/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970186
Project No: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

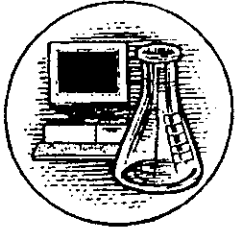
<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	10/22/1997	
as Diesel	ND	ND		mg/Kg	10/22/1997	
as Lube Oil	ND	ND		mg/Kg	10/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

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October 27, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970195
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following samples were received on October 24, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970195-1	14-1-SP	Soil	10/24/1997
970195-2	14-2-SP	Soil	10/24/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970195
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
14-1-SP	970195-1	10/24/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	10/25/1997	
NWTPH-HCID (soil)						
Extraction Date					10/24/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	10/24/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	10/24/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	10/24/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
14-2-SP	970195-2	10/24/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	10/25/1997	
NWTPH-HCID (soil)						
Extraction Date					10/24/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	10/24/1997	
as Diesel	NWTPH-HCID	ND	59	mg/Kg dry wt	10/24/1997	
as Lube Oil	NWTPH-HCID	ND	118	mg/Kg dry wt	10/24/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970195
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	10/24/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	10/24/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	10/24/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970195
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
14-1-SP	970195-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	103 %	10/24/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	104 %	10/24/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
14-2-SP	970195-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	128 %	10/24/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	127 %	10/24/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	105 %	10/24/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	103 %	10/24/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970195
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	10/24/1997	
as Diesel	ND	ND		mg/Kg	10/24/1997	
as Lube Oil	ND	ND		mg/Kg	10/24/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

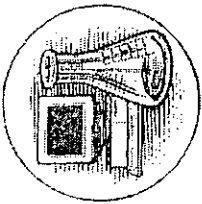
KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

Specialty Analytical, An Oregon Corporation

CHAIN OF CUSTODY RECORD



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007 - Phone
(503) 612-8572 - Fax

Contact Person/Project Manager: Tom Gainer

Company: Century West Engineering

Address: 825 NE Multnomah, Suite 425
Portland

Phone: 503-231-6078

Fax: 503-231-6482

Project No. 408060019/401 Project Name Salem - Court house

Invoice To _____ P.O. No. _____

Collected By: Tom Gainer
Signature: _____
Printed: TOM GAINER SAUL

Signature: _____
Printed: _____

Turn Around Time
 Normal
 Rush 10/27/97
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	For Laboratory Use	Relinquished By:	Date	Time
10/24/97	1125	14-1-SP	Soil	1	NH4ID	Lab Job No. <u>9710198</u> Shipped Via _____ Air Bill No. _____ Temperature On Receipt _____ °C Specialty Analytical Containers? Y/N Specialty Analytical Trip Blanks? Y/N	Received By: <u>Mark Miller</u> Company: <u>Specialty Analytical</u>	10/24/97	1735
11/20	14-2-SP	Soil	1	1		Comments: <u>IF Detect Run</u> <u>Quant</u>	Relinquished By:		
							Received For Lab By:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Copies: White-Original

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TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

SALEM COURTHOUSE SQUARE PROJECT

Salem, Oregon

Century West Engineering

Project No. 4080600119-4201

Hydrocarbon Identification by NWTPH-HCID for Soils

Sample Number	Date	Gasoline mg/kg	Diesel mg/kg	Heavy Oil mg/kg	Recovery (%)
Meth. Blank	10/28/97	nd	nd	nd	95
1-4-10.0'	10/28/97	nd	nd	nd	106
1-5-12.0'	10/28/97	nd	nd	nd	105
4-2-13.0'	10/28/97	nd	nd	nd	99
4-3-12.0'	10/28/97	nd	nd	nd	95
5-1-12.0'	10/28/97	nd	nd	nd	105
Method Detection Limits		20	50	100	

"nd" Indicates not detected at the listed detection limit.

"D" Indicates detected above the listed detection limit.



CLIENT: ~~TransGlobal Environmental Geosciences~~ CENTURY WEST ENG
 ADDRESS: 825 NE Multnomah, Suite 425
 PHONE (503) 231-6079 FAX: (503) 231-6482
 CLIENT PROJECT #: 4080600119/4201 PROJECT MANAGER: Tom Quinn

DATE: 10/28/97 PAGE 1 OF _____
 PROJECT NAME: Salem Courthouse Square
 LOCATION: Salem, OR.
 COLLECTOR: Ingrid May Seal DATE OF COLLECTION

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES	FIELD NOTES	Total Number of Containers	Laboratory Note Number
1-4-10.0'	10.0'	1035	Soil		VOA 807/8010 VOA 602/8020 VOA 624/8240 Semi Vol 625/8270 TPH 478.1 TPH 8075 (gasoline) TPH 8075 (diesel) TPH 8015 (g & d) PAH 610/8100 PEST/PCBs 8080 ORGANIC LEAD TOTAL LEAD PH ASBESTOS			
1-5-12.0'	12.0'	1040				IF Detect		
4-2-13.0'	13.0'	0805				Quant		
4-3-12.0'	12.0'	0807						
5-1-12.0'	12.0'	1400						

RELINQUISHED BY (Signature) *Ingrid May Seal* DATE/TIME 10/29/97 0939 RECEIVED BY (Signature) *Richard R...* DATE/TIME 10/29/97

RELINQUISHED BY (Signature) _____ DATE/TIME _____ RECEIVED BY (Signature) _____ DATE/TIME _____

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS _____

CHAIN OF CUSTODY SEALS Y/N/NA _____

SEALS INTACT? Y/N/NA _____

RECEIVED GOOD COND./COLD _____

NOTES: _____

SAMPLE DISPOSAL INSTRUCTIONS

TEG DISPOSAL @ \$2.00 each Return Pickup



Specialty Analytical

19761 S.W. 95th Place
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Fax (503) 612-8572

November 12, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970238
Project No: 4080600119/4201
Project Name: Salem - Court House Square

The following samples were received on November 10, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970238-1	3-1-SP3	Soil	11/10/1997
970238-2	3-1-10.0'	Soil	11/10/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970238
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-1-SP3	970238-1	11/10/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	90	0.01	%	11/11/1997	
NWTPH-HCID (soil)						
Extraction Date					11/10/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	11/10/1997	
as Diesel	NWTPH-HCID	ND	56	mg/Kg dry wt	11/10/1997	
as Lube Oil	NWTPH-HCID	ND	111	mg/Kg dry wt	11/10/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-1-10.0'	970238-2	11/10/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	11/11/1997	
NWTPH-HCID (soil)						
Extraction Date					11/10/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/10/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	11/10/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	11/10/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970238
Project No: 4080600119/4201
Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	11/10/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	11/10/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	11/10/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970238
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-1-SP3	970238-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	96 %	11/10/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	97 %	11/10/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-1-10.0'	970238-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	99 %	11/10/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	100 %	11/10/1997

<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	102 %	11/10/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	102 %	11/10/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation



Specialty Analytical

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November 13, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970246
Project No: 4080600119/4201
Project Name: Salem - Court House Square

The following sample was received on November 11, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970246-1	3-UST4-2-6.0'	Soil	11/11/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970246
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST4-2-6.0'	970246-1	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	11/11/1997	A3
as Lube Oil	NWTPH-HCID	OIL	116	mg/Kg dry wt	11/11/1997	
NWTPH-Dx (soil)						
Extraction Date					11/12/1997	
Dilution Factor		1			11/13/1997	
as Diesel	NWTPH-Dx	ND	17	mg/Kg dry wt	11/13/1997	
as Lube Oil	NWTPH-Dx	ND	58	mg/Kg dry wt	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970246
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	11/11/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	11/11/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	11/13/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970246
Project No: 4080600119/4201
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST4-2-6.0'	970246-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	137 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	138 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	103 %	11/13/1997

Sample I.D.
Method Blank

Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	99 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	100 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	112 %	11/13/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970246
Project No: 4080600119/4201
Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	1,014	1,008	99.4	mg/Kg	11/13/1997	
as Lube Oil	510.3	543.8	106.6	mg/Kg	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970246
Project No: 4080600119/4201
Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>
NWTPH-Dx (soil) as Diesel	170.0	140.5	82.6	--	--	--	11/13/1997
as Lube Oil	170.0	175.9	103.5	--	--	--	11/13/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970246
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	11/11/1997	
as Diesel	ND	ND		mg/Kg	11/11/1997	
as Lube Oil	OIL	ND		mg/Kg	11/11/1997	
NWTPH-Dx (soil)						
as Diesel	82,000	85,000	3.6	mg/Kg	11/13/1997	
as Lube Oil	ND	ND		mg/Kg	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
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KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

Specialty Analytical, An Oregon Corporation



Specialty Analytical

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Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

November 14, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970243
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following sample was received on November 11, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Sampled</u>
970243-1	8-3-14.5'	Soil	11/11/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-3-14.5'	970243-1	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/11/1997	
Dilution Factor		1			11/11/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	DIESEL	57	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	115	mg/Kg dry wt	11/11/1997	
NWTPH-Dx (soil)						
Extraction Date					11/12/1997	
Dilution Factor					11/13/1997	
as Diesel	NWTPH-Dx	310	43	mg/Kg dry wt	11/13/1997	
as Lube Oil	NWTPH-Dx	ND	140	mg/Kg dry wt	11/13/1997	
TCLP Metals (3)						
TCLP Extraction					11/12/1997	
ICP Digestion		-			11/13/1997	
TCLP Cadmium, ICP	6010	ND	0.08	mg/L	11/13/1997	
TCLP Chromium, ICP	6010	ND	0.01	mg/L	11/13/1997	
TCLP Lead, ICP	6010	ND	0.15	mg/L	11/13/1997	
Halogenated Solvents 8010 (soil)						
Dilution Factor		-			11/12/1997	Q
		2				
Bromodichloromethane	8010	ND	4.0	µg/Kg	11/12/1997	
Bromoform	8010	ND	4.0	µg/Kg	11/12/1997	
Bromomethane	8010	ND	54	µg/Kg	11/12/1997	
Carbon Tetrachloride	8010	ND	4.0	µg/Kg	11/12/1997	
Chlorobenzene	8010	ND	4.0	µg/Kg	11/12/1997	
Chloroethane	8010	ND	4.0	µg/Kg	11/12/1997	
2-Chloroethylvinyl ether	8010	ND	10	µg/Kg	11/12/1997	
Chloroform	8010	ND	4.0	µg/Kg	11/12/1997	
Chloromethane	8010	ND	4.0	µg/Kg	11/12/1997	
Dibromochloromethane	8010	ND	4.0	µg/Kg	11/12/1997	
1,2-Dichlorobenzene	8010	ND	4.0	µg/Kg	11/12/1997	
1,3-Dichlorobenzene	8010	ND	4.0	µg/Kg	11/12/1997	
1,4-Dichlorobenzene	8010	ND	4.0	µg/Kg	11/12/1997	
Dichlorodifluoromethane	8010	ND	4.0	µg/Kg	11/12/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-3-14.5'	970243-1	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8010 con't						
1,1-Dichloroethane	8010	ND	4.0	µg/Kg	11/12/1997	
1,2-Dichloroethane	8010	ND	4.0	µg/Kg	11/12/1997	
1,1-Dichloroethene	8010	ND	4.0	µg/Kg	11/12/1997	
cis-1,2-Dichloroethene	8010	ND	4.0	µg/Kg	11/12/1997	
trans-1,2-Dichloroethene	8010	ND	4.0	µg/Kg	11/12/1997	
1,2-Dichloropropane	8010	ND	4.0	µg/Kg	11/12/1997	
cis-1,3-Dichloropropene	8010	ND	4.0	µg/Kg	11/12/1997	
trans-1,3-Dichloropropene	8010	ND	4.0	µg/Kg	11/12/1997	
Freon 113	8010	ND	4.0	µg/Kg	11/12/1997	
Methylene Chloride	8010	ND	20	µg/Kg	11/12/1997	
Ethylene dibromide	8010	ND	4.0	µg/Kg	11/12/1997	
1,1,2,2-Tetrachloroethane	8010	ND	4.0	µg/Kg	11/12/1997	
Tetrachloroethene	8010	ND	4.0	µg/Kg	11/12/1997	
1,1,1-Trichloroethane	8010	ND	4.0	µg/Kg	11/12/1997	
1,1,2-Trichloroethane	8010	ND	4.0	µg/Kg	11/12/1997	
Trichloroethene	8010	ND	4.0	µg/Kg	11/12/1997	
Trichlorofluoromethane	8010	ND	4.0	µg/Kg	11/12/1997	
Vinyl chloride	8010	ND	4.0	µg/Kg	11/12/1997	
PCB 8080 (soil)						
Extraction Date					11/13/1997	
Dilution Factor		1			11/14/1997	
Aroclor 1016	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1260	8080	ND	0.05	mg/Kg	11/14/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	11/11/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	11/11/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	25	mg/Kg	11/13/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	11/13/1997	
TCLP Metals (3)						
TCLP Cadmium, ICP	6010	ND	0.08	mg/L	11/13/1997	
TCLP Chromium, ICP	6010	ND	0.01	mg/L	11/13/1997	
TCLP Lead, ICP	6010	ND	0.15	mg/L	11/13/1997	
Halogenated Solvents 8010 (soil)						
Bromodichloromethane	8010	ND	2.0	µg/Kg	11/12/1997	
Bromoform	8010	ND	2.0	µg/Kg	11/12/1997	
Bromomethane	8010	ND	27	µg/Kg	11/12/1997	
Carbon Tetrachloride	8010	ND	2.0	µg/Kg	11/12/1997	
Chlorobenzene	8010	ND	2.0	µg/Kg	11/12/1997	
Chloroethane	8010	ND	2.0	µg/Kg	11/12/1997	
2-Chloroethylvinyl ether	8010	ND	5.0	µg/Kg	11/12/1997	
Chloroform	8010	ND	2.0	µg/Kg	11/12/1997	
Chloromethane	8010	ND	2.0	µg/Kg	11/12/1997	
Dibromochloromethane	8010	ND	2.0	µg/Kg	11/12/1997	
1,2-Dichlorobenzene	8010	ND	2.0	µg/Kg	11/12/1997	
1,3-Dichlorobenzene	8010	ND	2.0	µg/Kg	11/12/1997	
1,4-Dichlorobenzene	8010	ND	2.0	µg/Kg	11/12/1997	
Dichlorodifluoromethane	8010	ND	2.0	µg/Kg	11/12/1997	
1,1-Dichloroethane	8010	ND	2.0	µg/Kg	11/12/1997	
1,2-Dichloroethane	8010	ND	2.0	µg/Kg	11/12/1997	
1,1-Dichloroethene	8010	ND	2.0	µg/Kg	11/12/1997	
cis-1,2-Dichloroethene	8010	ND	2.0	µg/Kg	11/12/1997	
trans-1,2-Dichloroethene	8010	ND	2.0	µg/Kg	11/12/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8010 con't						
1,2-Dichloropropane	8010	ND	2.0	µg/Kg	11/12/1997	
cis-1,3-Dichloropropene	8010	ND	2.0	µg/Kg	11/12/1997	
trans-1,3-Dichloropropene	8010	ND	2.0	µg/Kg	11/12/1997	
Freon 113	8010	ND	2.0	µg/Kg	11/12/1997	
Methylene Chloride	8010	ND	10	µg/Kg	11/12/1997	
Ethylene dibromide	8010	ND	2.0	µg/Kg	11/12/1997	
1,1,2,2-Tetrachloroethane	8010	ND	2.0	µg/Kg	11/12/1997	
Tetrachloroethene	8010	ND	2.0	µg/Kg	11/12/1997	
1,1,1-Trichloroethane	8010	ND	2.0	µg/Kg	11/12/1997	
1,1,2-Trichloroethane	8010	ND	2.0	µg/Kg	11/12/1997	
Trichloroethene	8010	ND	2.0	µg/Kg	11/12/1997	
Trichlorofluoromethane	8010	ND	2.0	µg/Kg	11/12/1997	
Vinyl chloride	8010	ND	2.0	µg/Kg	11/12/1997	
PCB 8080 (soil)						
Aroclor 1016	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	11/14/1997	
Aroclor 1260	8080	ND	0.05	mg/Kg	11/14/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-3-14.5'	970243-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID	137 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	138 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	119 %	11/13/1997
1,2-Dichlorobutane (Surr.)	8010	90 %	11/12/1997
Decachlorobiphenyl (Surr.)	8080	77 %	11/14/1997
Tetrachlorometaxylene (Surr.)	8080	81 %	11/14/1997

Sample I.D.

Method Blank

Bromofluorobenzene (Surr.)	NWTPH-HCID	99 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	100 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	112 %	11/13/1997
1,2-Dichlorobutane (Surr.)	8010	89 %	11/12/1997
Decachlorobiphenyl (Surr.)	8080	78 %	11/14/1997
Tetrachlorometaxylene (Surr.)	8080	84 %	11/14/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	1,014	1,009	99.4	mg/Kg	11/13/1997	
as Lube Oil	510.3	543.8	106.6	mg/Kg	11/13/1997	
Halogenated Solvents 8010 (soil)						
Bromodichloromethane	60.0	63.0	105.0	µg/Kg	11/12/1997	
Bromoform	60.0	52.3	87.2	µg/Kg	11/12/1997	
Bromomethane	60.0	67.6	112.7	µg/Kg	11/12/1997	
Carbon Tetrachloride	60.0	64.2	107.0	µg/Kg	11/12/1997	
Chlorobenzene	60.0	59.3	98.8	µg/Kg	11/12/1997	
Chloroethane	60.0	57.6	96.0	µg/Kg	11/12/1997	
2-Chloroethylvinyl ether	60.0	60.3	100.5	µg/Kg	11/12/1997	
Chloroform	60.0	63.3	105.5	µg/Kg	11/12/1997	
Chloromethane	60.0	56.6	94.3	µg/Kg	11/12/1997	
Dibromochloromethane	60.0	55.6	92.7	µg/Kg	11/12/1997	
1,2-Dichlorobenzene	60.0	55.7	92.8	µg/Kg	11/12/1997	
1,3-Dichlorobenzene	60.0	56.0	93.3	µg/Kg	11/12/1997	
1,4-Dichlorobenzene	60.0	55.4	92.3	µg/Kg	11/12/1997	
Dichlorodifluoromethane	60.0	65.3	108.8	µg/Kg	11/12/1997	
1,1-Dichloroethane	60.0	63.4	105.7	µg/Kg	11/12/1997	
1,2-Dichloroethane	60.0	58.2	97.0	µg/Kg	11/12/1997	
1,1-Dichloroethene	60.0	64.4	107.3	µg/Kg	11/12/1997	
cis-1,2-Dichloroethene	60.0	64.6	107.7	µg/Kg	11/12/1997	
trans-1,2-Dichloroethene	60.0	65.3	108.8	µg/Kg	11/12/1997	
1,2-Dichloropropane	60.0	62.2	103.7	µg/Kg	11/12/1997	
cis-1,3-Dichloropropene	60.0	65.4	109.0	µg/Kg	11/12/1997	
trans-1,3-Dichloropropene	60.0	64.1	106.8	µg/Kg	11/12/1997	
Freon 113	60.0	56.7	94.5	µg/Kg	11/12/1997	
Methylene Chloride	60.0	51.4	85.7	µg/Kg	11/12/1997	
Ethylene dibromide	60.0	51.8	86.3	µg/Kg	11/12/1997	
1,1,2,2-Tetrachloroethane	60.0	54.1	90.2	µg/Kg	11/12/1997	
Tetrachloroethene	60.0	60.7	101.2	µg/Kg	11/12/1997	
1,1,1-Trichloroethane	60.0	61.0	101.7	µg/Kg	11/12/1997	
1,1,2-Trichloroethane	60.0	53.9	89.8	µg/Kg	11/12/1997	
Trichloroethene	60.0	62.7	104.5	µg/Kg	11/12/1997	
Trichlorofluoromethane	60.0	64.7	107.8	µg/Kg	11/12/1997	
Vinyl chloride	60.0	60.5	100.8	µg/Kg	11/12/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
TCLP Metals									
TCLP-Cadmium	1.00	ND	0.89	89.0	--	--	--	11/13/1997	
TCLP-Chromium	5.00	ND	4.21	84.0	--	--	--	11/13/1997	
TCLP-Lead	5.00	ND	4.70	89.0	--	--	--	11/13/1997	
Halogenated Solvents									
Chlorobenzene	60.0	ND	58.5	97.5	58.2	97.0	0.5	11/12/1997	
1,1-Dichloroethene	60.0	ND	60.2	100.3	58.4	97.3	2.9	11/12/1997	
Trichloroethene	60.0	ND	60.1	100.2	58.7	97.8	2.3	11/12/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970243
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWPH-Dx (soil)								
as Diesel	170.0	140.5	82.6	--	--	--	11/13/1997	
as Lube Oil	170.0	175.9	103.5	--	--	--	11/13/1997	
PCB's 8080								
Aroclor 1254	0.959	0.839	87.5	0.86	88.0	0.57	11/14/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

November 14, 1997

Page 10

Client: Century West Engineering
Specialty Analytical Job No: 970243
Project No: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

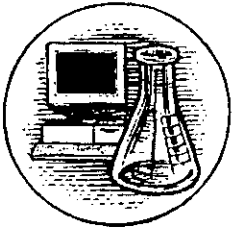
<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	11/11/1997	
as Diesel	ND	ND		mg/Kg	11/11/1997	
as Lube Oil	OIL	ND		mg/Kg	11/11/1997	
NWTPH-Dx (soil)						
as Diesel	82,000	85,000	3.6	mg/Kg	11/13/1997	
as Lube Oil	ND	ND		mg/Kg	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation.

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

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November 12, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970245
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following samples were received on November 10, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970245-1	8-UST8-1-6.0'	Soil	11/11/1997
970245-2	8-UST8-2-6.0'	Soil	11/11/1997
970245-3	8-1-SP1	Soil	11/11/1997
970245-4	8-1-SP2	Soil	11/11/1997
970245-5	8-2-SP2	Soil	11/11/1997
970245-6	11-1-12.0'	Soil	11/11/1997
970245-7	11-1-SP	Soil	11/11/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970245
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-UST8-1-6.0'	970245-1	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	77	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	26	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	65	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	130	mg/Kg dry wt	11/11/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-UST8-2-6.0'	970245-2	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	59	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	118	mg/Kg dry wt	11/11/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-1-SP1	970245-3	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	82	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	61	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	122	mg/Kg dry wt	11/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970245
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-1-SP2	970245-4	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	88	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	114	mg/Kg dry wt	11/11/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-2-SP2	970245-5	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	89	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	56	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	112	mg/Kg dry wt	11/11/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
11-1-12.0'	970245-6	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	77	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	26	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	65	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	130	mg/Kg dry wt	11/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970245
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
11-1-SP	970245-7	11/11/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	11/12/1997	
NWTPH-HCID (soil)						
Extraction Date					11/11/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/11/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	115	mg/Kg dry wt	11/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970245
Project No: 4080600119/4401
Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	11/11/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	11/11/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	11/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970245
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-UST8-1-6.0'	970245-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	111 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	112 %	11/11/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-UST8-2-6.0'	970245-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	109 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	110 %	11/11/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-1-SP1	970245-3		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	115 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	116 %	11/11/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-1-SP2	970245-4		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	106 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	107 %	11/11/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-2-SP2	970245-5		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	109 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	112 %	11/11/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970245
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
11-1-12.0'	970245-6		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	103 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	106 %	11/11/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
11-1-SP	970245-7		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	109 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	112 %	11/11/1997

<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	99 %	11/11/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	100 %	11/11/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970245
Project No: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	11/11/1997	
as Diesel	ND	ND		mg/Kg	11/11/1997	
as Lube Oil	OIL	OIL		mg/Kg	11/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

Specialty Analytical, An Oregon Corporation

CHAIN OF CUSTODY RECORD

Specialty Analytical

19761 S.W. 95th Place
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(503) 612-9007 - Phone
(503) 612-8572 - Fax

Contact Person/Project Manager TOM GIMLIK

Company CENTURY WEST ENGINEERING CORP.

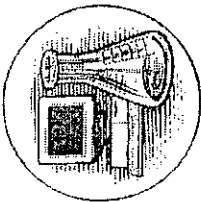
Address 825 NE MUSHMEATH, SUITE 425

PORTLAND, OR 97232

Phone (503) 231-6077 Fax (503) 231-6482

Project No. 428260019/4401 Project Name Salem Courthouse

Invoice To _____ P.O. No. _____



Collected By: [Signature]

Signature [Signature]

Printed _____

Signature _____

Printed _____

Turn Around Time _____

Normal
 Rush

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix
11/11/17	12:15	8-4518-1-60 8-4518-1-60	Soil
	12:18	8-4518-2-60 8-4518-2-60	
	14:55	8-1-SP1	
	15:00	8-1-SP2	
	15:03	8-2-SP2	
	13:55	11-1-12.05	
	14:50	11-1-SP	

No. of Containers	Analyses	For Laboratory Use	
		Comments	Lab I.D.
		Lab Job No. <u>970245</u>	<u>-1</u>
		Shipped Via <u>Client</u>	<u>-2</u>
		Air Bill No. _____	<u>-3</u>
		Temperature On Receipt _____ °C	<u>-4</u>
		Specialty Analytical Containers? Y/N	<u>-5</u>
		Specialty Analytical Trip Blanks? Y/N	<u>-6</u>
			<u>-7</u>

Relinquished By: [Signature] Date 11/11/17 Time 17:05

Received By: [Signature] Date 11/11/17 Time 17:05

Company: _____

Company: _____

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Copies: White-Original

Yellow-Project File

Pink-Customer Copy



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

November 14, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970254
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following samples were received on November 13, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970254-1	8-1-SP3	Soil	11/13/1997
970254-2	8-2-SP3	Soil	11/13/1997
970254-3	8-3-SP3	Soil	11/13/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970254
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-1-SP3	970254-1	11/13/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	11/14/1997	
NWTPH-HCID (soil)						
Extraction Date					11/13/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	11/13/1997	
as Diesel	NWTPH-HCID	ND	59	mg/Kg dry wt	11/13/1997	
as Lube Oil	NWTPH-HCID	ND	118	mg/Kg dry wt	11/13/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-2-SP3	970254-2	11/13/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	11/14/1997	
NWTPH-HCID (soil)						
Extraction Date					11/13/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/13/1997	
as Diesel	NWTPH-HCID	ND	58	mg/Kg dry wt	11/13/1997	
as Lube Oil	NWTPH-HCID	ND	116	mg/Kg dry wt	11/13/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-3-SP3	970254-3	11/13/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	11/14/1997	
NWTPH-HCID (soil)						
Extraction Date					11/13/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	11/13/1997	
as Diesel	NWTPH-HCID	ND	59	mg/Kg dry wt	11/13/1997	
as Lube Oil	NWTPH-HCID	ND	118	mg/Kg dry wt	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970254
Project No: 4080600119/4401
Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	11/13/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	11/13/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970254
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-1-SP3	970254-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	105 %	11/13/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	108 %	11/13/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-2-SP3	970254-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	95 %	11/13/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	96 %	11/13/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-3-SP3	970254-3		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	98 %	11/13/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	100 %	11/13/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	102 %	11/13/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	103 %	11/13/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970254
Project No: 4080600119/4401
Project Name: Salem - Court House Square

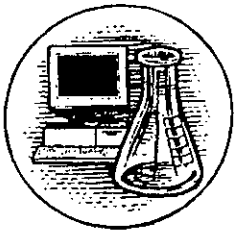
DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	11/13/1997	
as Diesel	ND	ND		mg/Kg	11/13/1997	
as Lube Oil	ND	ND		mg/Kg	11/13/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

19761 S.W. 95th Place
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(503) 612-9007
Fax (503) 612-8572

December 05, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970261
Project No: 4080600119/401
Project Name: Salem - Court House Square

The following samples were received on November 17, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970261-1	8-4-SP3	Soil	11/17/1997
970261-2	8-1-SP4	Soil	11/17/1997
970261-3	8-2-SP4	Soil	11/17/1997
970261-4	13-1-HST	Soil	11/17/1997
970261-5	13-1-12.0'	Soil	11/17/1997
970261-6	13-1-SP1	Soil	11/17/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

Sample I.D. **Lab I.D.** **Date Sampled**
 8-4-SP3 970261-1 11/17/1997

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	11/18/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/17/1997	
Dilution Factor		1			11/17/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/17/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	11/17/1997	
as Lube Oil	NWTPH-HCID	ND	115	mg/Kg dry wt	11/17/1997	

Sample I.D. **Lab I.D.** **Date Sampled**
 8-1-SP4 970261-2 11/17/1997

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	88	0.01	%	11/18/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/17/1997	
Dilution Factor		1			11/17/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/17/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	11/17/1997	
as Lube Oil	NWTPH-HCID	ND	114	mg/Kg dry wt	11/17/1997	

Sample I.D. **Lab I.D.** **Date Sampled**
 8-24-SP43 970261-3 11/17/1997

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	11/18/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/17/1997	
Dilution Factor		1			11/17/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	11/17/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	11/17/1997	
as Lube Oil	NWTPH-HCID	ND	115	mg/Kg dry wt	11/17/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
13-1-HST	970261-4	11/17/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	11/18/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/17/1997	
Dilution Factor		1			11/17/1997	
as Gasoline	NWTPH-HCID	GAS	23	mg/Kg dry wt	11/17/1997	
as Diesel	NWTPH-HCID	DIESEL	58	mg/Kg dry wt	11/17/1997	
as Lube Oil	NWTPH-HCID	OIL	116	mg/Kg dry wt	11/17/1997	
NWTPH-Gx (soil)						
Dilution Factor		1			11/20/1997	
as Gasoline	NWTPH-Gx	6.7	2.9	mg/Kg dry wt	11/20/1997	
NWTPH-Dx (soil)						
Extraction Date					11/18/1997	
Dilution Factor		50			11/18/1997	
as Diesel	NWTPH-Dx	ND	870	mg/Kg dry wt	11/18/1997	A3
as Lube Oil	NWTPH-Dx	7,600	2,900	mg/Kg dry wt	11/18/1997	
PCB 8080 (soil)						
Extraction Date					12/02/1997	
Dilution Factor		1			12/02/1997	
Aroclor 1016	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1260	8080	0.22	0.05	mg/Kg	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
13-1-12.0'	970261-5	11/17/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	83	0.01	%	11/18/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/17/1997	
Dilution Factor		1			11/17/1997	
as Gasoline	NWTPH-HCID	ND	24	mg/Kg dry wt	11/17/1997	
as Diesel	NWTPH-HCID	ND	60	mg/Kg dry wt	11/17/1997	
as Lube Oil	NWTPH-HCID	ND	120	mg/Kg dry wt	11/17/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
13-1-SP1	970261-6	11/17/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	80	0.01	%	11/18/1997	
NWTPH-HCID (soil)						
Extraction Date		-			11/17/1997	
Dilution Factor		1			11/17/1997	
as Gasoline	NWTPH-HCID	ND	25	mg/Kg dry wt	11/17/1997	
as Diesel	NWTPH-HCID	ND	63	mg/Kg dry wt	11/17/1997	
as Lube Oil	NWTPH-HCID	ND	125	mg/Kg dry wt	11/17/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	11/17/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	11/17/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	11/17/1997	
NWTPH-Gx (soil)						
as Gasoline	NWTPH-Gx	ND	2.5	mg/Kg	11/20/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	11/18/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	11/18/1997	
PCB 8080 (soil)						
Aroclor 1016	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	12/02/1997	
Aroclor 1260	8080	ND	0.05	mg/Kg	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-4-SP3	970261-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	95 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	97 %	11/17/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-1-SP4	970261-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	99 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	101 %	11/17/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-2-SP4	970261-3		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	89 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	90 %	11/17/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
13-1-HST	970261-4		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	109 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	134 %	11/17/1997
Bromofluorobenzene (Surr.)	NWTPH-Gx (s)	89 %	11/20/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	Dil	11/18/1997
Decachlorobiphenyl (Surr.)	8080	81 %	12/02/1997
Tetrachlorometaxylene (Surr.)	8080	93 %	12/02/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
13-1-12.0'	970261-5		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	104 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	106 %	11/17/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
13-1-SP1	970261-6		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	102 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	102 %	11/17/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	92 %	11/17/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	91 %	11/17/1997
Bromofluorobenzene (Surr.)	NWTPH-Gx (s)	102 %	11/20/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	100 %	11/18/1997
Decachlorobiphenyl (Surr.)	8080	98 %	12/02/1997
Tetrachlorometaxylene (Surr.)	8080	109 %	12/02/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970261
Project No: 4080600119/4301
Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Gx (soil) as Gasoline	1,000	952.0	95.2	mg/Kg	11/20/1997	
NWTPH-Dx (soil) as Diesel	1,014	990.4	97.7	mg/Kg	11/18/1997	
as Lube Oil	510.3	520.9	102.1	mg/Kg	11/18/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>
NWTPH-Gx (soil) as Gasoline	25.0	21.2	88.4	--	--	--	11/20/1997
NWTPH-Dx (soil) as Diesel	170.0	164.6	96.8	--	--	--	11/18/1997
as Lube Oil	170.0	185.0	108.8	--	--	--	11/18/1997
PCB's 8080 Aroclor 1254	0.485	0.499	103.0	0.456	99.0	4.0	12/02/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970261
 Project No: 4080600119/4301
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	11/17/1997	
as Diesel	ND	ND		mg/Kg	11/17/1997	
as Oil	ND	ND		mg/Kg	11/17/1997	
NWTPH-Gx (soil)						
as Gasoline	5,400	6,800	23.0	mg/Kg	11/20/1997	MP
NWTPH-Dx (soil)						
as Diesel	690	760	9.7	mg/Kg	11/18/1997	
as Lube Oil	920	1,000	8.3	mg/Kg	11/18/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

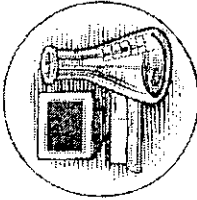
Specialty Analytical, An Oregon Corporation

CHAIN OF CUSTODY RECORD

Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007 - Phone
(503) 612-8572 - Fax

Contact Person/Project Manager TOM SAINGER
Company CENTURY WEST ENGINEERING CORP.
Address 825 NE Multnomah, Suite 425
PORTLAND OR. 97232
Phone (503) 231-6078 Fax (503) 231-6482
Project No. 4880600119 / 4404 Project Name Salem Courthouse
Invoice To _____ P.O. No. _____



Collected By: Ingmar Saal
Signature: _____
Printed: INGMAR SAAL

Signature: _____
Printed: _____

Turn Around Time Normal ASAP Rush
Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	Received By:	Time
11/7/97	1152	8-4-SP3	Soil	Ingmar Saal	1720
	1145	8-1-SP4	}		
	1148	8-2-SP4			
11/7/97	1455	13-1-HST	Soil	Ingmar Saal	1720
	1400	13-1-120'	}		
	1405	13-1-SP1			

No. of Containers	Analyses	For Laboratory Use	
		Comments	Lab I.D.
1	TPH-DX	IF Defect on on HClD Run Quant.	-1
1	TPH-GX		-2
1	PLB		-3
1	NWHClD		-4
1			-5
1			-6

Relinquished By: _____ Date _____
Company: _____
Received For Lab By: Ingmar Saal Date 11/7/97 17:20
Time _____

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Copies: White-Original Yellow-Project File Pink-Customer Copy



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

December 08, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970287
Project No: 4080600119/4401
Project Name: Court House Square

The following samples were received on November 26, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970287-1	8-4-15'	Soil	11/26/1997
970287-2	8-5-18'	Soil	11/26/1997
970287-3	8-6-15'	Soil	11/26/1997
970287-4	8-7-15'	Soil	11/26/1997
970287-5	8-8-15'	Soil	11/26/1997
970287-6	8-9-15'	Soil	11/26/1997
970287-7	8-10-15'	Soil	11/26/1997
970287-8	8-11-18'	Soil	11/26/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970287
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-4-15'	970287-1	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	76	0.01	%	12/01/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/05/1997	
Benzene	8020	ND	66	µg/Kg dry wt	12/05/1997	
Toluene	8020	ND	130	µg/Kg dry wt	12/05/1997	
Ethylbenzene	8020	200	130	µg/Kg dry wt	12/05/1997	
Xylenes (Total)	8020	300	130	µg/Kg dry wt	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		5			11/28/1997	
as Diesel	NWTPH-Dx	7,200	99	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	230	mg/Kg dry wt	11/28/1997	A3
PAH-8270SIM (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/08/1997	
Acenaphthene	8270	ND	50	µg/Kg	12/08/1997	
Acenaphthylene	8270	65	50	µg/Kg	12/08/1997	
Anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/08/1997	
Chrysene	8270	ND	50	µg/Kg	12/08/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Fluorene	8270	ND	50	µg/Kg	12/08/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Naphthalene	8270	125	50	µg/Kg	12/08/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/08/1997	
Pyrene	8270	ND	50	µg/Kg	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970287
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-5-18'	970287-2	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	12/01/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	88	18	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	59	mg/Kg dry wt	11/28/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-6-15'	970287-3	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	81	0.01	%	12/01/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/04/1997	
Benzene	8020	ND	2.3	µg/Kg dry wt	12/04/1997	
Toluene	8020	ND	2.3	µg/Kg dry wt	12/04/1997	
Ethylbenzene	8020	ND	2.3	µg/Kg dry wt	12/04/1997	
Xylenes (Total)	8020	ND	2.3	µg/Kg dry wt	12/04/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	210	19	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	62	mg/Kg dry wt	11/28/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970287
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-7-15'	970287-4	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	12/01/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	36	17	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	57	mg/Kg dry wt	11/28/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-8-15'	970287-5	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	81	0.01	%	12/01/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	24	19	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	62	mg/Kg dry wt	11/28/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-9-15'	970287-6	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	83	0.01	%	12/01/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	43	18	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	60	mg/Kg dry wt	11/28/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

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Client: Century West Engineering
 Specialty Analytical Job No: 970287
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-10-15'	970287-7	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	77	0.01	%	12/01/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	1,800	19	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	65	mg/Kg dry wt	11/28/1997	A3

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-11-18'	970287-8	11/26/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	85	0.01	%	12/01/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/04/1997	
Benzene	8020	ND	2.4	µg/Kg dry wt	12/04/1997	
Toluene	8020	ND	2.4	µg/Kg dry wt	12/04/1997	
Ethylbenzene	8020	9.5	2.4	µg/Kg dry wt	12/04/1997	
Xylenes (Total)	8020	26	2.4	µg/Kg dry wt	12/04/1997	
NWTPH-Dx (soil)						
Date Extracted		-			11/28/1997	
Dilution Factor		1			11/28/1997	
as Diesel	NWTPH-Dx	190	22	mg/Kg dry wt	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	72	mg/Kg dry wt	11/28/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970287
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
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<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (soil)						
Benzene	8020	ND	2.0	µg/Kg	12/04/1997	
Toluene	8020	ND	2.0	µg/Kg	12/04/1997	
Ethylbenzene	8020	ND	2.0	µg/Kg	12/04/1997	
Xylenes (Total)	8020	ND	2.0	µg/Kg	12/04/1997	
BTEX-8020 (soil)						
Benzene	8020	ND	50	µg/Kg	12/05/1997	
Toluene	8020	ND	100	µg/Kg	12/05/1997	
Ethylbenzene	8020	ND	100	µg/Kg	12/05/1997	
Xylenes (Total)	8020	ND	100	µg/Kg	12/05/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	11/28/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	11/28/1997	
PAH-8270SIM (soil)						
Acenaphthene	8270	ND	50	µg/Kg	12/08/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/08/1997	
Anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/08/1997	
Chrysene	8270	ND	50	µg/Kg	12/08/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Fluorene	8270	ND	50	µg/Kg	12/08/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Naphthalene	8270	ND	50	µg/Kg	12/08/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/08/1997	
Pyrene	8270	ND	50	µg/Kg	12/08/1997	

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 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970287
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-4-15'	970287-1		
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	79 %	12/05/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	Dil	11/28/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	42 %	12/08/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	57 %	12/08/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	76 %	12/08/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-5-18'	970287-2		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	92 %	11/28/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-6-15'	970287-3		
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	97 %	12/04/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	111 %	11/28/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-7-15'	970287-4		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	104 %	11/28/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-8-15'	970287-5		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	99 %	11/28/1997

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Client: Century West Engineering
Specialty Analytical Job No: 970287
Project No: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)					
as Diesel	210	190	10.0	11/28/1997	
as Lube Oil	ND	ND		11/28/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

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December 10, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970296
Project No: 4080600119/4401
Project Name: Court House Square

The following samples were received on December 02, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970296-1	8-12-15.0'	Soil	12/02/1997
970296-2	8-13-15.0' - HOLD	Soil	12/02/1997
970296-3	9-1-15.0'	Soil	12/02/1997
970296-4	9-2-16.0'	Soil	12/02/1997
970296-5	9-3-18.0'	Soil	12/02/1997
970296-6	9-4-15.0'	Soil	12/02/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-3-18.0'	970296-5	12/02/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	12/02/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/02/1997	
Dilution Factor		1			12/02/1997	
as Diesel	NWTPH-Dx	3,800	17	mg/Kg dry wt	12/02/1997	
as Lube Oil	NWTPH-Dx	ND	58	mg/Kg dry wt	12/02/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/10/1997	
Benzene	8020	ND	58	µg/Kg dry wt	12/10/1997	
Toluene	8020	145	116	µg/Kg dry wt	12/10/1997	
Ethylbenzene	8020	ND	116	µg/Kg dry wt	12/10/1997	
Xylenes (Total)	8020	297	116	µg/Kg dry wt	12/10/1997	
PAH-8270SIM (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/08/1997	
Acenaphthene	8270	ND	50	µg/Kg	12/08/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/08/1997	
Anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/08/1997	
Chrysene	8270	ND	50	µg/Kg	12/08/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Fluorene	8270	ND	50	µg/Kg	12/08/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Naphthalene	8270	ND	50	µg/Kg	12/08/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/08/1997	
Pyrene	8270	ND	50	µg/Kg	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-4-15.0'	970296-6	12/02/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	89	0.01	%	12/03/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/02/1997	
Dilution Factor		4			12/02/1997	
as Diesel	NWTPH-Dx	4,900	67	mg/Kg dry wt	12/02/1997	
as Lube Oil	NWTPH-Dx	ND	225	mg/Kg dry wt	12/02/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
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<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (soil)						
Benzene	8020	ND	50	µg/Kg	12/03/1997	
Toluene	8020	ND	100	µg/Kg	12/03/1997	
Ethylbenzene	8020	ND	100	µg/Kg	12/03/1997	
Xylenes (Total)	8020	ND	100	µg/Kg	12/03/1997	
BTEX-8020 (soil)						
Benzene	8020	ND	50	µg/Kg	12/10/1997	
Toluene	8020	ND	100	µg/Kg	12/10/1997	
Ethylbenzene	8020	ND	100	µg/Kg	12/10/1997	
Xylenes (Total)	8020	ND	100	µg/Kg	12/10/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	12/02/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	12/02/1997	
PAH-8270SIM (soil)						
Acenaphthene	8270	ND	50	µg/Kg	12/08/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/08/1997	
Anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/08/1997	
Chrysene	8270	ND	50	µg/Kg	12/08/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/08/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/08/1997	
Fluorene	8270	ND	50	µg/Kg	12/08/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/08/1997	
Naphthalene	8270	ND	50	µg/Kg	12/08/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/08/1997	
Pyrene	8270	ND	50	µg/Kg	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

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Sample I.D.
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<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
PAH-8270SIM (soil)						
Acenaphthene	8270	ND	50	µg/Kg	12/09/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/09/1997	
Anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/09/1997	
Chrysene	8270	ND	50	µg/Kg	12/09/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Fluorene	8270	ND	50	µg/Kg	12/09/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Naphthalene	8270	ND	50	µg/Kg	12/09/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/09/1997	
Pyrene	8270	ND	50	µg/Kg	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-12-15.0'	970296-1		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	MI	12/02/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	81 %	12/05/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	24 %	12/09/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	48 %	12/09/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	69 %	12/09/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-1-15.0'	970296-3		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	120 %	12/02/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-2-16.0'	970296-4		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	101 %	12/02/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-3-18.0'	970296-5		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	MI	12/02/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	82 %	12/10/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	29 %	12/08/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	65 %	12/08/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	71 %	12/08/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-4-15.0'	970296-6		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	Dil	12/02/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970296
Project No: 4080600119/4401
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

Sample I.D.

Method Blank

ortho-terphenyl (Surr.)	NWTPH-Dx (s)	99 %	12/02/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	85 %	12/03/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	109 %	12/10/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	30 %	12/08/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	55 %	12/08/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	68 %	12/08/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	42 %	12/09/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	60 %	12/09/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	71 %	12/09/1997

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Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (soil)						
Benzene	50.0	49.9	99.8	mg/Kg	12/03/1997	
Toluene	50.0	49.7	99.4	mg/Kg	12/03/1997	
Ethylbenzene	50.0	51.0	102.0	mg/Kg	12/03/1997	
Xylenes (Total)	100.0	101.0	101.0	mg/Kg	12/03/1997	
BTEX-8020 (soil)						
Benzene	50.0	51.3	102.6	mg/Kg	12/05/1997	
Toluene	50.0	50.9	101.8	mg/Kg	12/05/1997	
Ethylbenzene	50.0	51.9	103.8	mg/Kg	12/05/1997	
Xylenes (Total)	100.0	104.8	104.8	mg/Kg	12/05/1997	
BTEX-8020 (soil)						
Benzene	50.0	51.6	103.2	mg/Kg	12/10/1997	
Toluene	50.0	50.7	101.4	mg/Kg	12/10/1997	
Ethylbenzene	50.0	51.7	103.4	mg/Kg	12/10/1997	
Xylenes (Total)	100.0	104.0	104.0	mg/Kg	12/10/1997	
NWTPH-Dx (soil)						
as Diesel	998.3	927.9	92.9	mg/Kg	12/02/1997	
as Lube Oil	510.3	527.7	103.4	mg/Kg	12/02/1997	
PAH-8270 (soil)						
Acenaphthene	5.0	4.68	93.6	µg/Kg	12/08/1997	
Benzo(a)pyrene	5.0	4.52	90.4	µg/Kg	12/08/1997	
Fluoranthene	5.0	5.18	103.6	µg/Kg	12/08/1997	
PAH-8270 (soil)						
Acenaphthene	5.0	4.51	90.2	µg/Kg	12/09/1997	
Benzo(a)pyrene	5.0	4.36	87.2	µg/Kg	12/09/1997	
Fluoranthene	5.0	4.58	91.6	µg/Kg	12/09/1997	

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Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (soil)									
Benzene	1.60	ND	1.618	101.1	1.526	95.4	5.9	12/05/1997	
Toluene	1.60	ND	1.598	99.9	1.543	96.4	3.5	12/05/1997	
Ethyl benzene	1.60	0.2	1.758	97.4	1.706	94.1	3.4	12/05/1997	
Xylenes (Total)	4.90	0.3	4.903	93.9	4.811	92.1	2.0	12/05/1997	
BTEX-8020 (soil)									
Benzene	1.42	ND	1.30	91.5	1.10	77.5	16.7	12/10/1997	
Toluene	1.42	ND	1.32	93.0	1.20	84.5	9.5	12/10/1997	
Ethyl benzene	1.42	ND	1.35	95.1	1.30	91.5	3.8	12/10/1997	
Xylenes (Total)	4.30	ND	4.00	93.0	3.80	88.4	5.1	12/10/1997	

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Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970296
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>
BTEX-8020 (soil)							
Benzene	1.25	1.175	94.0	--	--	--	12/03/1997
Toluene	1.25	1.226	98.1	--	--	--	12/03/1997
Ethylbenzene	1.25	1.234	98.7	--	--	--	12/03/1997
Xylenes (Total)	3.75	3.555	94.8	--	--	--	12/03/1997
BTEX-8020 (soil)							
Benzene	1.25	1.28	102.4	--	--	--	12/10/1997
Toluene	1.25	1.31	104.8	--	--	--	12/10/1997
Ethylbenzene	1.25	1.31	104.8	--	--	--	12/10/1997
Xylenes (Total)	3.75	3.78	100.8	--	--	--	12/10/1997
NWTPH-Dx (soil)							
as Diesel	170.0	157.2	92.0	--	--	--	12/02/1997
as Lube Oil	170.0	155.1	91.0	--	--	--	12/02/1997
PAH-8270 (soil)							
Acenaphthene	5.00	4.16	83.2	--	--	--	12/08/1997
Pyrene	5.00	4.25	85.0	--	--	--	12/08/1997
PAH-8270 (soil)							
Acenaphthene	5.00	3.87	77.4	3.99	79.8	2.0	12/09/1997
Pyrene	5.00	4.12	82.4	4.51	90.2	6.1	12/09/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

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Client: Century West Engineering
Specialty Analytical Job No: 970296
Project No: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)					
as Diesel	ND	ND	10.0	12/02/1997	
as Lube Oil	ND	ND		12/02/1997	

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KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

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December 12, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970303
Project No: 4080600119/4401
Project Name: Court House Square

The following samples were received on December 03, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970303-1	9-5-15.0'	Soil	12/03/1997
970303-2	9-6-18.0'	Soil	12/03/1997
970303-3	9-7-15.0'	Soil	12/03/1997
970303-4	9-8-17.0'	Soil	12/03/1997
970303-5	9-9-13.0'	Soil	12/03/1997
970303-6	12-2-12.0'	Soil	12/03/1997
970303-7	12-3-12.0'	Soil	12/03/1997
970303-8	12-4-12.0'	Soil	12/03/1997
970303-9	12-5-15.0'	Soil	12/03/1997
970303-10	10-1-12.0'	Soil	12/03/1997
970303-11	10-1-SP	Soil	12/03/1997
970303-12	8-1-GW	Water	12/03/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-5-15.0'	970303-1	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	76	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	70	20	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	66	mg/Kg dry wt	12/04/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/11/1997	
Benzene	8020	ND	2.6	µg/Kg dry wt	12/11/1997	
Toluene	8020	ND	2.6	µg/Kg dry wt	12/11/1997	
Ethylbenzene	8020	ND	2.6	µg/Kg dry wt	12/11/1997	
Xylenes (Total)	8020	ND	6.6	µg/Kg dry wt	12/11/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-6-18.0'	970303-2	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	170	17	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	57	mg/Kg dry wt	12/04/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-7-15.0'	970303-3	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	83	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		10			12/05/1997	
as Diesel	NWTPH-Dx	6,800	180	mg/Kg dry wt	12/05/1997	
as Lube Oil	NWTPH-Dx	ND	600	mg/Kg dry wt	12/05/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-8-17.0'	970303-4	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	70	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	150	21	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	71	mg/Kg dry wt	12/04/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/11/1997	
Benzene	8020	ND	2.9	µg/Kg dry wt	12/11/1997	
Toluene	8020	ND	2.9	µg/Kg dry wt	12/11/1997	
Ethylbenzene	8020	ND	2.9	µg/Kg dry wt	12/11/1997	
Xylenes (Total)	8020	9.6	7.1	µg/Kg dry wt	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-9-13.0'	970303-5	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	84	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	110	18	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	60	mg/Kg dry wt	12/04/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
12-2-12.0'	970303-6	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	76	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	ND	20	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	66	mg/Kg dry wt	12/04/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
12-3-12.0'	970303-7	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	76	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/05/1997	
as Diesel	NWTPH-Dx	46	20	mg/Kg dry wt	12/05/1997	
as Lube Oil	NWTPH-Dx	180	66	mg/Kg dry wt	12/05/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
12-4-12.0'	970303-8	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	82	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	ND	18	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	61	mg/Kg dry wt	12/04/1997	

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 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
12-5-15.0'	970303-9	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	78	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	ND	19	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	64	mg/Kg dry wt	12/04/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
10-1-12.0'	970303-10	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	77	0.01	%	12/05/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/04/1997	
Dilution Factor		1			12/04/1997	
as Diesel	NWTPH-Dx	ND	19	mg/Kg dry wt	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	65	mg/Kg dry wt	12/04/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
10-1-SP	970303-11	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	94	0.01	%	12/04/1997	
NWTPH-HCID (soil)						
Date Extracted		-			12/03/1997	
Dilution Factor		1			12/03/1997	
as Gasoline	NWTPH-HCID	ND	21	mg/Kg dry wt	12/03/1997	
as Diesel	NWTPH-HCID	ND	53	mg/Kg dry wt	12/03/1997	
as Lube Oil	NWTPH-HCID	ND	106	mg/Kg dry wt	12/03/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
8-1-GW	970303-12	12/03/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX (water)						
Dilution Factor		1			12/05/1997	
Benzene	8020	ND	0.5	µg/L	12/05/1997	
Toluene	8020	ND	1.0	µg/L	12/05/1997	
Ethyl Benzene	8020	ND	0.5	µg/L	12/05/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/05/1997	
PAH-8270SIM (water)						
Extraction Date		-			12/08/1997	
Dilution Factor		1			12/08/1997	
Acenaphthene	8270	ND	0.1	µg/L	12/08/1997	
Acenaphthylene	8270	ND	0.1	µg/L	12/08/1997	
Anthracene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(a)anthracene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(a)pyrene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(b)fluoranthene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(k)fluoranthene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(ghi)perylene	8270	ND	0.1	µg/L	12/08/1997	
Chrysene	8270	ND	0.1	µg/L	12/08/1997	
Dibenzo(a,h)anthracene	8270	ND	0.1	µg/L	12/08/1997	
Fluoranthene	8270	ND	0.1	µg/L	12/08/1997	
Fluorene	8270	ND	0.1	µg/L	12/08/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	0.1	µg/L	12/08/1997	
Naphthalene	8270	2.2	0.1	µg/L	12/08/1997	
Phenanthrene	8270	ND	0.1	µg/L	12/08/1997	
Pyrene	8270	ND	0.1	µg/L	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	12/03/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	12/03/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	12/03/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	12/04/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	12/04/1997	
BTEX-8020 (soil)						
Benzene	8020	ND	2.0	µg/Kg	12/11/1997	
Toluene	8020	ND	2.0	µg/Kg	12/11/1997	
Ethylbenzene	8020	ND	2.0	µg/Kg	12/11/1997	
Xylenes (Total)	8020	ND	5.0	µg/Kg	12/11/1997	
BTEX-8020 (water)						
Benzene	8020	ND	0.5	µg/L	12/05/1997	
Toluene	8020	ND	1.0	µg/L	12/05/1997	
Ethylbenzene	8020	ND	0.5	µg/L	12/05/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/05/1997	
PAH-8270SIM (water)						
Acenaphthene	8270	ND	0.1	µg/L	12/08/1997	
Acenaphthylene	8270	ND	0.1	µg/L	12/08/1997	
Anthracene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(a)anthracene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(a)pyrene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(b)fluoranthene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(k)fluoranthene	8270	ND	0.1	µg/L	12/08/1997	
Benzo(ghi)perylene	8270	ND	0.1	µg/L	12/08/1997	
Chrysene	8270	ND	0.1	µg/L	12/08/1997	
Dibenzo(a,h)anthracene	8270	ND	0.1	µg/L	12/08/1997	
Fluoranthene	8270	ND	0.1	µg/L	12/08/1997	
Fluorene	8270	ND	0.1	µg/L	12/08/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	0.1	µg/L	12/08/1997	
Naphthalene	8270	ND	0.1	µg/L	12/08/1997	
Phenanthrene	8270	ND	0.1	µg/L	12/08/1997	
Pyrene	8270	ND	0.1	µg/L	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-5-15.0'	970303-1		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	106 %	12/04/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	88 %	12/11/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-6-18.0'	970303-2		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	119 %	12/04/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-7-15.0'	970303-3		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	Dil	12/05/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-8-17.0'	970303-4		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	111 %	12/04/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	97 %	12/11/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-9-13.0'	970303-5		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	111 %	12/04/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u> 12-2-12.0'	<u>Lab I.D.</u> 970303-6		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	113 %	12/04/1997
 <u>Sample I.D.</u> 12-3-12.0'	 <u>Lab I.D.</u> 970303-7		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	117 %	12/05/1997
 <u>Sample I.D.</u> 12-4-12.0'	 <u>Lab I.D.</u> 970303-8		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	108 %	12/04/1997
 <u>Sample I.D.</u> 12-5-15.0'	 <u>Lab I.D.</u> 970303-9		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	115 %	12/04/1997
 <u>Sample I.D.</u> 10-1-12.0'	 <u>Lab I.D.</u> 970303-10		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	15 %	12/04/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
10-1-SP	970303-11		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	116 %	12/03/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	117 %	12/03/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
8-1-GW	970303-12		
Bromofluorobenzene (Surr.)	BTEX-8020 (w)	92 %	12/05/1997
Nitrobenzene (Surr.)	PAH-8270 (w)	52 %	12/08/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (w)	59 %	12/08/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (w)	76 %	12/08/1997

<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	114 %	12/03/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	115 %	12/03/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	101 %	12/04/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	98 %	12/11/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (w)	90 %	12/05/1997
Nitrobenzene (Surr.)	PAH-8270 (w)	76 %	12/08/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (w)	82 %	12/08/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (w)	80 %	12/08/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	998.3	936.7	93.8	mg/Kg	12/04/1997	
as Lube Oil	510.3	503.2	98.6	mg/Kg	12/04/1997	
BTEX-8020 (soil)						
Benzene	50.0	45.1	90.2	µg/Kg	12/11/1997	
Toluene	50.0	45.4	92.8	µg/Kg	12/11/1997	
Ethylbenzene	50.0	46.6	93.2	µg/Kg	12/11/1997	
Xylenes (Total)	100.0	93.0	93.0	µg/Kg	12/11/1997	
BTEX-8020 (water)						
Benzene	50.0	51.3	102.6	µg/L	12/05/1997	
Toluene	50.0	50.9	101.8	µg/L	12/05/1997	
Ethylbenzene	50.0	51.9	103.8	µg/L	12/05/1997	
Xylenes (Total)	100.0	104.8	104.8	µg/L	12/05/1997	
PAH-8270 (water)						
Acenaphthene	5.0	4.16	83.2	µg/L	12/08/1997	
Benzo(a)pyrene	5.0	5.23	104.6	µg/L	12/08/1997	
Fluoranthene	5.0	5.31	106.2	µg/L	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970303
Project No: 4080600119/4401
Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)									
Benzene	20.0	ND	20.08	100.4	20.92	104.6	4.1	12/05/1997	
Toluene	20.0	ND	20.76	103.8	21.77	108.9	4.7	12/05/1997	
Ethyl benzene	20.0	ND	21.02	105.1	22.00	110.0	4.6	12/05/1997	
Xylenes (Total)	40.0	ND	42.07	105.2	44.30	110.8	5.2	12/05/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>
NWTPH-Dx (soil)							
as Diesel	170.0	169.7	100.0	--	--	--	12/04/1997
as Lube Oil	170.0	172.6	102.0	--	--	--	12/04/1997
BTEX-8020 (soil)							
Benzene	25.0	21.9	87.6	22.9	91.6	4.5	12/11/1997
Toluene	25.0	23.7	94.8	25.0	100.0	5.3	12/11/1997
Ethylbenzene	25.0	23.2	92.8	24.3	97.2	4.6	12/11/1997
Xylenes (Total)	50.0	47.3	94.6	50.2	100.4	5.9	12/11/1997
BTEX-8020 (water)							
Benzene	25.0	26.3	105.2	25.3	101.2	3.9	12/05/1997
Toluene	25.0	27.3	109.2	26.4	105.6	3.4	12/05/1997
Ethylbenzene	25.0	27.7	110.8	26.6	106.4	4.1	12/05/1997
Xylenes (Total)	50.0	57.4	114.8	52.8	105.6	8.3	12/05/1997
PAH-8270 (water)							
Acenaphthene	1.25	1.02	81.6	1.12	89.6	6.3	12/08/1997
Pyrene	1.25	0.94	75.2	1.09	87.2	10.0	12/08/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970303
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)					
as Gasoline	ND	ND		12/03/1997	
as Diesel	ND	ND		12/03/1997	
as Lube Oil	ND	ND		12/03/1997	
NWTPH-Dx (soil)					
as Diesel	70	89	23.9	12/04/1997	R
as Lube Oil	ND	ND		12/04/1997	
NWTPH-Dx (soil)					
as Diesel	150	150	0.0	12/04/1997	
as Lube Oil	ND	ND		12/04/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

CHAIN OF CUSTODY RECORD

Page 1 of

Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007 - Phone
(503) 612-8572 - Fax

Contact Person/Project Manager TIM GAINER

Company CENTURY WEST ENGINEERING CORP.

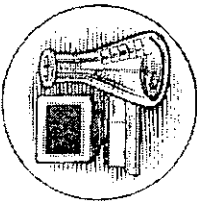
Address 825 NE Multnomah, SUITE 425

PORTLAND, OR. 97232

Phone 503-231-6078 Fax 503-231-6492

Project No. 4080600119/490 Project Name Salem Courthouse Square

Invoice To P.O. No.



Collected By:
Signature: [Signature]
Printed: WYNNE SAUL

Signature:
Printed:

Turn Around Time

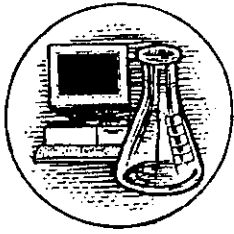
Normal ASAP

Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses		For Laboratory Use				
					Relinquished By:	Company:	Lab Job No.	Comments			
12/31/97	0835	9-5-15.0'	S					970303	IF Detect on HCLD	-1	
	0840	9-6-18.0'							Run Quant.	-2	
	1335	9-7-15.0'								-3	
	1340	9-8-17.0'								-4	
	1430	9-9-13.0'								-5	
	0955	12-2-12.0'								-6	
	1015	12-3-12.0'								-7	
	1025	12-4-12.0'								-8	
	1030	12-5-15.0'								-9	
	1130	10-1-12.0'								-10	
	1125	10-1-SP								-11	
	1230	8-1-6W	W							-12	
Relinquished By: <u>[Signature]</u>		Date: <u>12/31/97</u>	Time: <u>17:20</u>	Received By: <u>[Signature]</u>		Company: <u> </u>		Relinquished By: <u> </u>		Date: <u>12/31/97</u>	Time: <u>17:20</u>
Company: <u>CWEE</u>		Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.		Company: <u> </u>		Received For Lab-By: <u> </u>		Company: <u> </u>		Date: <u>12/31/97</u>	Time: <u>17:20</u>
Copies: White-Original		Yellow-Project File		Pink-Customer Copy		Received For Lab-By: <u> </u>		Company: <u> </u>		Date: <u>12/31/97</u>	Time: <u>17:20</u>



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
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December 07, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970313
Project No: 4080600119/4201
Project Name: Salem - Court House Square

The following samples were received on December 05, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Sampled</u>
970313-1	1-UST5-1-10.0'	Soil	12/05/1997
970313-2	1-UST6-1-10.0'	Soil	12/05/1997
970313-3	3-UST1-1-10.5'	Soil	12/05/1997
970313-4	3-UST2-1-9.5'	Soil	12/05/1997
970313-5	3-UST3-1-10.0'	Soil	12/05/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970313
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-UST5-1-10.0'	970313-1	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	91	0.01	%	12/06/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/05/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	12/05/1997	
as Diesel	NWTPH-HCID	ND	55	mg/Kg dry wt	12/05/1997	
as Lube Oil	NWTPH-HCID	ND	110	mg/Kg dry wt	12/05/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-UST6-1-10.0'	970313-2	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	81	0.01	%	12/06/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/05/1997	
as Gasoline	NWTPH-HCID	ND	25	mg/Kg dry wt	12/05/1997	
as Diesel	NWTPH-HCID	ND	62	mg/Kg dry wt	12/05/1997	
as Lube Oil	NWTPH-HCID	ND	123	mg/Kg dry wt	12/05/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970313
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST1-1-10.5'	970313-3	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	87	0.01	%	12/06/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/06/1997	
as Gasoline	NWTPH-HCID	ND	25	mg/Kg dry wt	12/06/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	12/06/1997	
as Lube Oil	NWTPH-HCID	ND	115	mg/Kg dry wt	12/06/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST2-1-9.5'	970313-4	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	90	0.01	%	12/06/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/06/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	12/06/1997	
as Diesel	NWTPH-HCID	ND	56	mg/Kg dry wt	12/06/1997	
as Lube Oil	NWTPH-HCID	ND	111	mg/Kg dry wt	12/06/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970313
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST3-1-10.0'	970313-5	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	89	0.01	%	12/06/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/05/1997	
Dilution Factor		1			12/06/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	12/06/1997	
as Diesel	NWTPH-HCID	ND	56	mg/Kg dry wt	12/06/1997	
as Lube Oil	NWTPH-HCID	ND	112	mg/Kg dry wt	12/06/1997	

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 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970313
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	12/05/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	12/05/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	12/05/1997	

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Client: Century West Engineering
 Specialty Analytical Job No: 970313
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-UST5-1-10.0'	970313-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID	111 %	12/05/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	112 %	12/05/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-UST6-1-10.0'	970313-2		
Bromofluorobenzene (Surr.)	NWTPH-HCID	110 %	12/05/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	111 %	12/05/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST1-1-10.5'	970313-3		
Bromofluorobenzene (Surr.)	NWTPH-HCID	117 %	12/06/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	117 %	12/06/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST2-1-9.5'	970313-4		
Bromofluorobenzene (Surr.)	NWTPH-HCID	108 %	12/06/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	109 %	12/06/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST3-1-10.0'	970313-5		
Bromofluorobenzene (Surr.)	NWTPH-HCID	112 %	12/06/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	112 %	12/06/1997

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Specialty Analytical Job No: 970313
Project No: 4080600119/4201
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

Sample I.D.

Method Blank

Bromofluorobenzene (Surr.)	NWTPH-HCID	102 %	12/05/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	101 %	12/05/1997

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Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970313
Project No: 4080600119/4201
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	12/06/1997	
as Diesel	ND	ND		mg/Kg	12/06/1997	
as Lube Oil	ND	ND		mg/Kg	12/06/1997	

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KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

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December 12, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970314
Project No: 4080600119/4401
Project Name: Court House Square

The following samples were received on December 05, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970314-1	3-2-10.5'	Soil	12/05/1997
970314-2	9-10-14.0'	Soil	12/05/1997
970314-3	9-11-14.0'	Soil	12/05/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-2-10.5'	970314-1	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	80	0.01	%	12/06/1997	
NWTPH-HCID (soil)						
Date Extracted		-			12/05/1997	
Dilution Factor		1			12/06/1997	
as Gasoline	NWTPH-HCID	Min. Spirits	25	mg/Kg dry wt	12/06/1997	
as Diesel	NWTPH-HCID	ND	63	mg/Kg dry wt	12/06/1997	A3
as Lube Oil	NWTPH-HCID	ND	125	mg/Kg dry wt	12/06/1997	
NWTPH-Gx (soil)						
Dilution Factor		50			12/10/1997	
as Mineral Spirits	NWTPH-Gx	1,500	234	mg/Kg dry wt	12/10/1997	

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 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-10-14.0'	970314-2	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	84	0.01	%	12/06/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/08/1997	
Dilution Factor		10			12/08/1997	
as Diesel	NWTPH-Dx	14,000	180	mg/Kg dry wt	12/08/1997	
as Lube Oil	NWTPH-Dx	ND	600	mg/Kg dry wt	12/08/1997	
BTEX-8020 (soil)						
Dilution Factor		1			12/11/1997	
Benzene	8020	ND	2.4	µg/Kg dry wt	12/11/1997	
Toluene	8020	7.6	2.4	µg/Kg dry wt	12/11/1997	
Ethylbenzene	8020	28	2.4	µg/Kg dry wt	12/11/1997	
Xylenes (Total)	8020	160	119	µg/Kg dry wt	12/10/1997	
PAH-8270SIM (soil)						
Extraction Date		-			12/09/1997	
Dilution Factor		1			12/09/1997	
Acenaphthene	8270	ND	50	µg/Kg	12/09/1997	
Acenaphthylene	8270	110	50	µg/Kg	12/09/1997	
Anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/09/1997	
Chrysene	8270	ND	50	µg/Kg	12/09/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Fluorene	8270	ND	50	µg/Kg	12/09/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Naphthalene	8270	380	50	µg/Kg	12/09/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/09/1997	
Pyrene	8270	ND	50	µg/Kg	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-11-14.0'	970314-3	12/05/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	84	0.01	%	12/06/1997	
NWTPH-Dx (soil)						
Date Extracted		-			12/08/1997	
Dilution Factor		1			12/08/1997	
as Diesel	NWTPH-Dx	88	18	mg/Kg dry wt	12/08/1997	
as Lube Oil	NWTPH-Dx	ND	60	mg/Kg dry wt	12/08/1997	

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 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	12/06/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	12/06/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	12/06/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	12/08/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	12/08/1997	
NWTPH-Gx (soil)						
as Mineral Spirits	NWTPH-Gx	ND	5.0	mg/Kg	12/10/1997	
BTEX-8020 (soil)						
Benzene	8020	ND	50	µg/Kg	12/10/1997	
Toluene	8020	ND	100	µg/Kg	12/10/1997	
Ethylbenzene	8020	ND	100	µg/Kg	12/10/1997	
Xylenes (Total)	8020	ND	100	µg/Kg	12/10/1997	
BTEX-8020 (soil)						
Benzene	8020	ND	2.0	µg/Kg	12/11/1997	
Toluene	8020	ND	2.0	µg/Kg	12/11/1997	
Ethylbenzene	8020	ND	2.0	µg/Kg	12/11/1997	
Xylenes (Total)	8020	ND	5.0	µg/Kg	12/11/1997	
PAH-8270SIM (soil)						
Acenaphthene	8270	ND	50	µg/Kg	12/09/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/09/1997	
Anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/09/1997	
Chrysene	8270	ND	50	µg/Kg	12/09/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Fluorene	8270	ND	50	µg/Kg	12/09/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Naphthalene	8270	ND	50	µg/Kg	12/09/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/09/1997	
Pyrene	8270	ND	501	µg/Kg	12/09/1997	

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Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-2-10.5'	970314-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	135 %	12/06/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	116 %	12/06/1997
Bromofluorobenzene (Surr.)	NWTPH-Gx (s)	Dil	12/10/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-10-14.0'	970314-2		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	119 %	12/08/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	79 %	12/10/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	Dil	12/11/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	29 %	12/09/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	61 %	12/09/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	73 %	12/09/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-11-14.0'	970314-3		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	117 %	12/08/1997

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID (s)	105 %	12/05/1997
ortho-terphenyl (Surr.)	NWTPH-HCID (s)	105 %	12/05/1997
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	100 %	12/08/1997
Bromofluorobenzene (Surr.)	NWTPH-Gx (s)	109 %	12/10/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	109 %	12/10/1997
Bromofluorobenzene (Surr.)	BTEX-8020 (s)	98 %	12/11/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	42 %	12/09/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	60 %	12/09/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	71 %	12/09/1997

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 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	998.3	942.7	94.4	mg/Kg	12/08/1997	
as Lube Oil	510.3	509.5	99.8	mg/Kg	12/08/1997	
NWTPH-Gx (soil)						
as Mineral Spirits	1,000	851.0	85.1	mg/Kg	12/10/1997	
BTEX-8020 (soil)						
Benzene	50.0	51.6	103.2	µg/Kg	12/10/1997	
Toluene	50.0	50.7	101.4	µg/Kg	12/10/1997	
Ethylbenzene	50.0	51.7	103.4	µg/Kg	12/10/1997	
Xylenes (Total)	100.0	104.0	104.0	µg/Kg	12/10/1997	
BTEX-8020 (soil)						
Benzene	50.0	45.1	90.2	µg/Kg	12/11/1997	
Toluene	50.0	46.4	92.8	µg/Kg	12/11/1997	
Ethylbenzene	50.0	46.6	93.2	µg/Kg	12/11/1997	
Xylenes (Total)	100.0	93.0	93.0	µg/Kg	12/11/1997	
PAH-8270 (soil)						
Acenaphthene	5.0	4.51	90.2	µg/Kg	12/09/1997	
Benzo(a)pyrene	5.0	4.36	87.2	µg/Kg	12/09/1997	
Fluoranthene	5.0	4.58	91.6	µg/Kg	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970314
Project No: 4080600119/4401
Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (soil)									
Benzene	1.42	ND	1.300	91.5	1.100	77.5	16.7	12/10/1997	
Toluene	1.42	ND	1.320	93.0	1.200	84.5	9.5	12/10/1997	
Ethyl benzene	1.42	ND	1.350	95.1	1.300	91.5	3.8	12/10/1997	
Xylenes (Total)	4.30	ND	4.000	93.0	3.800	88.4	5.1	12/10/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>
NWTPH-Dx (soil)							
as Diesel	170.0	163.3	96.0	--	--	--	12/08/1997
as Lube Oil	170.0	156.8	92.0	--	--	--	12/08/1997
NWTPH-Gx (soil)							
as Mineral Spirits	500.0	419.4	83.9	--	--	--	12/10/1997
BTEX-8020 (soil)							
Benzene	1.25	1.28	102.4	--	--	--	12/10/1997
Toluene	1.25	1.31	104.8	--	--	--	12/10/1997
Ethylbenzene	1.25	1.31	104.8	--	--	--	12/10/1997
Xylenes (Total)	3.75	3.78	100.8	--	--	--	12/10/1997
BTEX-8020 (soil)							
Benzerie	25.0	21.9	87.6	22.9	91.6	4.5	12/11/1997
Toluene	25.0	23.7	94.8	25.0	100.0	5.3	12/11/1997
Ethylbenzene	25.0	23.2	92.8	24.3	97.2	4.6	12/11/1997
Xylenes (Total)	50.0	47.3	94.6	50.2	100.4	5.9	12/11/1997
PAH-8270 (soil)							
Acenaphthene	5.00	3.87	77.4	3.99	79.8	2.0	12/09/1997
Pyrene	5.00	4.12	82.4	4.51	90.2	6.1	12/09/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970314
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)					
as Gasoline	Min. Spirits	Min. Spirits		12/06/1997	
as Diesel	ND	ND		12/06/1997	
as Lube Oil	ND	ND		12/06/1997	
NWTPH-Dx (soil)					
as Diesel	ND	ND		12/08/1997	
as Lube Oil	ND	ND		12/08/1997	
NWTPH-Gx (soil)					
as Mineral Spirits	1,500	1,400	6.9	12/10/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical

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(503) 612-9007 - Phone
(503) 612-8577 - Fax

Contact Person/Project Manager

TOM GAINBR

Company

CENTURY WEST ENGINEERING Corp

Address

825 NE Multnomah Suite 425

PORTLAND OR 97232

Phone

(503) 231-6078

Fax

(503) 231-6402

Collected By:

Signature: [Handwritten Signature]

Signature

Printed

IN SWLAR SAM

Signature

Printed

Turn Around Time

Normal 12/8 Next

Rush _____

Specify _____

Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses				For Laboratory Use Lab Job No. <u>970314</u>	Shipped Via _____	Air Bill No. _____	Temperature On Receipt _____ °C	Specialty Analytical Containers? Y/N	Specialty Analytical Trip Blanks? Y/N	Lab I.D.
					NW TPH-DX	NW ACID	PATH	BTEX							
<u>12/5/97</u>	<u>1010</u>	<u>3-2-10.5"</u>	<u>Soil</u>	<u>2</u>	X	X	X	X	<u>IF Detect on ACID</u>					<u>-1</u>	
<u>1505</u>	<u>9-10-14.0"</u>	<u>Soil</u>	<u>Soil</u>	<u>2</u>	X	X	X	X	<u>RUN QUANT.</u>					<u>-2</u>	
<u>1515</u>	<u>9-11-14.0"</u>	<u>Soil</u>	<u>Soil</u>	<u>2</u>	X	X	X	X						<u>-3</u>	
Relinquished By: <u>[Signature]</u>		Date: <u>12/5/97</u>	Time: <u>1720</u>	Received By: _____		Company: _____		Relinquished By: _____		Company: _____		Date: _____	Time: _____		
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.															
Copies: White-Original				Yellow-Project File				Pink-Customer Copy				Received For Lab By: <u>[Signature]</u>			
Date: <u>12/5/97</u>				Time: <u>1720</u>				Date: <u>12/5/97</u>				Time: <u>1720</u>			



Specialty Analytical

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December 17, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970316
Project No: 4080600119/4401
Project Name: Salem - Court House Square
Revised Report Issued 12/17/97

The following samples were received on December 08, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970316-1	9-12-18.0'	Soil	12/08/1997
970316-2	9-13-15.0'	Soil	12/08/1997
970316-3	12-6-12.0'	Soil	12/08/1997

Report Approved By:


Project Manager
Specialty Analytical


Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>								
9-12-18.0'	970316-1	12/08/1997		<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
				Total Solids	160.3	85	0.01	%	12/09/1997	
				NWTPH-Dx (soil)						
				Extraction Date					12/08/1997	
				Dilution Factor		1			12/08/1997	
				as Diesel	NWTPH-Dx	500	18	mg/Kg dry wt	12/08/1997	
				as Lube Oil	NWTPH-Dx	ND	59	mg/Kg dry wt	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-13-15.0'	970316-2	12/08/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	12/09/1997	
NWTPH-Dx (soil)						
Extraction Date					12/08/1997	
Dilution Factor		1			12/08/1997	
as Diesel	NWTPH-Dx	3,200	17	mg/Kg dry wt	12/08/1997	
as Lube Oil	NWTPH-Dx	ND	58	mg/Kg dry wt	12/08/1997	
PAH-8270SIM (soil)						
Extraction Date		-			12/09/1997	
Dilution Factor		1			12/09/1997	
Acenaphthene	8270	ND	50	µg/Kg	12/09/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/09/1997	
Anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/09/1997	
Chrysene	8270	ND	50	µg/Kg	12/09/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Fluorene	8270	ND	50	µg/Kg	12/09/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Naphthalene	8270	260	50	µg/Kg	12/09/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/09/1997	
Pyrene	8270	ND	50	µg/Kg	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
12-6-12.0'	970316-3	12/08/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	86	0.01	%	12/09/1997	
NWTPH-Dx (soil)						
Extraction Date					12/08/1997	
Dilution Factor		1			12/08/1997	
as Diesel	NWTPH-Dx	ND	17	mg/Kg dry wt	12/08/1997	
as Lube Oil	NWTPH-Dx	ND	58	mg/Kg dry wt	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	12/08/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	12/08/1997	
PAH-8270SIM (soil)						
Acenaphthene	8270	ND	50	µg/Kg	12/09/1997	
Acenaphthylene	8270	ND	50	µg/Kg	12/09/1997	
Anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(a)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(b)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(k)fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Benzo(ghi)perylene	8270	ND	50	µg/Kg	12/09/1997	
Chrysene	8270	ND	50	µg/Kg	12/09/1997	
Dibenzo(a,h)anthracene	8270	ND	50	µg/Kg	12/09/1997	
Fluoranthene	8270	ND	50	µg/Kg	12/09/1997	
Fluorene	8270	ND	50	µg/Kg	12/09/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	50	µg/Kg	12/09/1997	
Naphthalene	8270	ND	50	µg/Kg	12/09/1997	
Phenanthrene	8270	ND	50	µg/Kg	12/09/1997	
Pyrene	8270	ND	50	µg/Kg	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-12-18.0'	970316-1		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	146 %	12/08/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
9-13-15.0'	970316-2		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	MI	12/08/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	41 %	12/09/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	58 %	12/09/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	82 %	12/09/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
12-6-12.0'	970316-3		
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	121 %	12/08/1997
<u>Sample I.D.</u>			
Method Blank			
ortho-terphenyl (Surr.)	NWTPH-Dx (s)	100 %	12/08/1997
Nitrobenzene (Surr.)	PAH-8270 (s)	42 %	12/09/1997
2-Fluorobiphenyl (Surr.)	PAH-8270 (s)	60 %	12/09/1997
p-Terphenyl-d14 (Surr.)	PAH-8270 (s)	71 %	12/09/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	998.3	942.7	94.4	mg/Kg	12/08/1997	
as Lube Oil	510.3	509.5	99.8	mg/Kg	12/08/1997	
PAH-8270 (soil)						
Acenaphthene	5.0	4.51	90.2	µg/Kg	12/09/1997	
Benzo(a)pyrene	5.0	4.36	87.2	µg/Kg	12/09/1997	
Fluoranthene	5.0	4.58	91.6	µg/Kg	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970316
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>
NWTPH-Dx (soil)							
as Diesel	170.0	163.3	96.0	--	--	--	12/08/1997
as Lube Oil	170.0	156.8	92.0	--	--	--	12/08/1997
PAH-8270 (soil)							
Acenaphthene	5.00	3.87	77.4	3.99	79.8	2.0	12/09/1997
Pyrene	5.00	4.21	82.4	4.51	90.2	6.1	12/09/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970316
Project No: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	ND	ND		mg/Kg	12/08/1997	
as Lube Oil	ND	ND		mg/Kg	12/08/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

Specialty Analytical, An Oregon Corporation



Specialty Analytical

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December 15, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970323
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following sample was received on December 09, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Sampled</u>
970323-1	9-1-GW	Water	12/09/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970323
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
9-1-GW	970323-1	12/09/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX (water)						
Dilution Factor		1			12/11/1997	
Benzene	8020	ND	0.5	µg/L	12/11/1997	
Toluene	8020	ND	1.0	µg/L	12/11/1997	
Ethyl Benzene	8020	ND	0.5	µg/L	12/11/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/11/1997	
PAH-8270SIM (water)						
Extraction Date		-			12/11/1997	
Dilution Factor		1			12/14/1997	
Acenaphthene	8270	ND	0.1	µg/L	12/14/1997	
Acenaphthylene	8270	0.8	0.1	µg/L	12/14/1997	
Anthracene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(a)anthracene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(a)pyrene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(b)fluoranthene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(k)fluoranthene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(ghi)perylene	8270	ND	0.1	µg/L	12/14/1997	
Chrysene	8270	ND	0.1	µg/L	12/14/1997	
Dibenzo(a,h)anthracene	8270	ND	0.1	µg/L	12/14/1997	
Fluoranthene	8270	ND	0.1	µg/L	12/14/1997	
Fluorene	8270	ND	0.1	µg/L	12/14/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	0.1	µg/L	12/14/1997	
Naphthalene	8270	4.1	0.1	µg/L	12/14/1997	
Phenanthrene	8270	ND	0.1	µg/L	12/14/1997	
Pyrene	8270	ND	0.1	µg/L	12/14/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970323
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX (water)						
Benzene	8020	ND	0.5	µg/L	12/11/1997	
Toluene	8020	ND	1.0	µg/L	12/11/1997	
Ethyl Benzene	8020	ND	0.5	µg/L	12/11/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/11/1997	
PAH-8270SIM (water)						
Acenaphthene	8270	ND	0.1	µg/L	12/14/1997	
Acenaphthylene	8270	ND	0.1	µg/L	12/14/1997	
Anthracene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(a)anthracene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(a)pyrene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(b)fluoranthene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(k)fluoranthene	8270	ND	0.1	µg/L	12/14/1997	
Benzo(ghi)perylene	8270	ND	0.1	µg/L	12/14/1997	
Chrysene	8270	ND	0.1	µg/L	12/14/1997	
Dibenzo(a,h)anthracene	8270	ND	0.1	µg/L	12/14/1997	
Fluoranthene	8270	ND	0.1	µg/L	12/14/1997	
Fluorene	8270	ND	0.1	µg/L	12/14/1997	
Indeno(1,2,3-cd)pyrene	8270	ND	0.1	µg/L	12/14/1997	
Naphthalene	8270	ND	0.1	µg/L	12/14/1997	
Phenanthrene	8270	ND	0.1	µg/L	12/14/1997	
Pyrene	8270	ND	0.1	µg/L	12/14/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970323
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

Sample I.D.

9-1-GW

Lab I.D.

970323-1

Bromofluorobenzene (Surr.)	BTEX 8020	90 %	12/11/1997
Nitrobenzene (Surr.)	PAH-8270	52 %	12/14/1997
2-Fluorobiphenyl (Surr.)	PAH-8270	59 %	12/14/1997
p-Terphenyl-d14 (Surr.)	PAH-8270	76 %	12/14/1997

Sample I.D.

Method Blank

Bromofluorobenzene (Surr.)	BTEX 8020	88 %	12/11/1997
Nitrobenzene (Surr.)	PAH-8270	64 %	12/14/1997
2-Fluorobiphenyl (Surr.)	PAH-8270	69 %	12/14/1997
p-Terphenyl-d14 (Surr.)	PAH-8270	83 %	12/14/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970323
Project No: 4080600119/4401
Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)						
Benzene	50.0	54.4	108.8	µg/L	12/11/1997	
Toluene	50.0	56.4	112.8	µg/L	12/11/1997	
Ethyl benzene	50.0	55.9	111.8	µg/L	12/11/1997	
Xylenes (Total)	100	112.6	112.6	µg/L	12/11/1997	
PAH-8270 (water)						
Acenaphthene	5.0	4.21	84.2	µg/L	12/14/1997	
Benzo(a)pyrene	5.0	4.86	97.2	µg/L	12/14/1997	
Fluoranthene	5.0	4.73	94.6	µg/L	12/14/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970323
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)									
Benzene	20.0	ND	19.6	98.0	20.7	103.5	5.5	12/11/1997	
Toluene	20.0	1.0	19.9	94.5	21.1	100.5	6.2	12/11/1997	
Ethyl benzene	20.0	0.67	20.0	96.7	21.1	102.2	5.5	12/11/1997	
Xylenes (Total)	40.0	ND	39.8	99.5	42.9	107.3	7.5	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970323
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

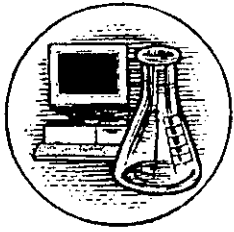
<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)								
Benzene	25.0	24.3	97.2	26.3	105.2	7.9	12/11/1997	
Toluene	25.0	25.1	100.4	27.1	108.4	7.7	12/11/1997	
Ethyl benzene	25.0	25.3	101.2	27.2	108.8	7.2	12/11/1997	
Xylenes (Total)	50.0	53.5	107.0	55.5	111.0	3.7	12/11/1997	
PAH-8270 (water)								
Acenaphthene	1.25	0.94	75.2	1.08	86.4	9.5	12/14/1997	
Pyrene	1.25	0.99	79.2	1.11	88.8	7.8	12/14/1997	

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Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

CASE NARRATIVE

Client: Century West Engineering
Specialty Analytical Job No: 970348
Project No: 4080600119/4401
Project Name: Salem-Court House Square

Sample 970348-1 (3-UST3-3) appears to consist of Kerosene range (C10-C16) petroleum hydrocarbons possibly mixed with solvents and a light lubricating oil.

If you have any questions or comments please feel free to contact us at (503) 612-9007.



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

December 29, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970348
Project No: 4080600119/4401
Project Name: Salem - Court House Square

The following sample was received on December 15, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Sampled</u>
970348-1	3-UST3-3	Soil	12/15/1997

Report Approved By:

Cindy Day

Project Manager
Specialty Analytical

[Signature]

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST3-3	970348-1	12/15/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	52	0.01	%	12/16/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/15/1997	
Dilution Factor		1			12/15/1997	
as Gasoline	NWTPH-HCID	GAS	38	mg/Kg dry wt	12/15/1997	A,CN
as Diesel	NWTPH-HCID	DIESEL	96	mg/Kg dry wt	12/15/1997	A1,CN
as Lube Oil	NWTPH-HCID	OIL	192	mg/Kg dry wt	12/15/1997	
NWTPH-Dx (soil)						
Extraction Date					12/17/1997	
Dilution Factor		50			12/17/1997	
as Diesel	NWTPH-Dx	ND	860	mg/Kg dry wt	12/17/1997	A3,CN
as Lube Oil	NWTPH-Dx	6,200	2,880	mg/Kg dry wt	12/17/1997	CN
as Kerosene	NWTPH-Dx	43,000	860	mg/Kg dry wt	12/17/1997	CN
8260 GC/MS (soil)						
Dilution Factor		12,500				
Acetone	8260	ND	150,000	µg/Kg	12/22/1997	
Benzene	8260	ND	62,000	µg/Kg	12/22/1997	
Bromobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
Bromochloromethane	8260	ND	62,000	µg/Kg	12/22/1997	
Bromodichloromethane	8260	ND	62,000	µg/Kg	12/22/1997	
Bromoform	8260	ND	62,000	µg/Kg	12/22/1997	
Bromomethane	8260	ND	62,000	µg/Kg	12/22/1997	
2-Butanone	8260	ND	120,000	µg/Kg	12/22/1997	
n-Butylbenzene	8260	170,000	62,000	µg/Kg	12/22/1997	
sec-Butylbenzene	8260	ND	62,000	µg/Kg	12/22/1997	
tert-Butylbenzene	8260	ND	62,000	µg/Kg	12/22/1997	
Carbon Tetrachloride	8260	ND	62,000	µg/Kg	12/22/1997	
Chlorobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
Chloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
Chloroform	8260	ND	62,000	µg/Kg	12/22/1997	
Chloromethane	8260	ND	62,000	µg/Kg	12/22/1997	
2-Chlorotoluene	8260	ND	62,000	µg/Kg	12/22/1997	
4-Chlorotoluene	8260	ND	62,000	µg/Kg	12/22/1997	
1,2-Dibromo-3-chloropropane	8260	ND	62,000	µg/Kg	12/22/1997	
1,2-Dibromoethane	8260	ND	62,000	µg/Kg	12/22/1997	
Dibromochloromethane	8260	ND	62,000	µg/Kg	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST3-3	970348-1	12/15/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8260 GC/MS con't		-				
Dibromomethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,2-Dichlorobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
1,3-Dichlorobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
1,4-Dichlorobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
Dichlorodifluoromethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,1-Dichloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,2-Dichloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,1-Dichloroethene	8260	ND	62,000	µg/Kg	12/22/1997	
cis-1,2-Dichloroethene	8260	ND	62,000	µg/Kg	12/22/1997	
trans-1,2-Dichloroethene	8260	ND	62,000	µg/Kg	12/22/1997	
1,2-Dichloropropane	8260	ND	62,000	µg/Kg	12/22/1997	
1,3-Dichloropropane	8260	ND	62,000	µg/Kg	12/22/1997	
2,2-Dichloropropane	8260	ND	62,000	µg/Kg	12/22/1997	
trans-1,3-Dichloropropene	8260	ND	62,000	µg/Kg	12/22/1997	
1,1-Dichloropropene	8260	ND	62,000	µg/Kg	12/22/1997	
cis-1,3-Dichloropropene	8260	ND	62,000	µg/Kg	12/22/1997	
Ethyl benzene	8260	ND	62,000	µg/Kg	12/22/1997	
Freon 113	8260	ND	62,000	µg/Kg	12/22/1997	
Hexachlorobutadiene	8260	ND	62,000	µg/Kg	12/22/1997	
Isopropylbenzene	8260	ND	62,000	µg/Kg	12/22/1997	
p-Isopropyltoluene	8260	ND	62,000	µg/Kg	12/22/1997	
Methylene Chloride	8260	ND	62,000	µg/Kg	12/22/1997	
Naphthalene	8260	770,000	62,000	µg/Kg	12/22/1997	
n-Propylbenzene	8260	ND	62,000	µg/Kg	12/22/1997	
Styrene	8260	ND	62,000	µg/Kg	12/22/1997	
1,1,1,2-Tetrachloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,1,2,2-Tetrachloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
Tetrachloroethene	8260	ND	62,000	µg/Kg	12/22/1997	
1,2,3-Trichlorobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
1,2,4-Trichlorobenzene	8260	ND	62,000	µg/Kg	12/22/1997	
1,1,1-Trichloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,1,2-Trichloroethane	8260	ND	62,000	µg/Kg	12/22/1997	
Trichloroethene	8260	ND	62,000	µg/Kg	12/22/1997	
Trichlorofluoromethane	8260	ND	62,000	µg/Kg	12/22/1997	
1,2,3-Trichloropropane	8260	ND	62,000	µg/Kg	12/22/1997	

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Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST3-3	970348-1	12/15/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8260 GC/MS con't						
1,2,4-Trimethylbenzene	8260	400,000	62,000	µg/Kg	12/22/1997	
1,3,5-Trimethylbenzene	8260	81,000	62,000	µg/Kg	12/22/1997	
Toluene	8260	ND	62,000	µg/Kg	12/22/1997	
Vinyl chloride	8260	ND	62,000	µg/Kg	12/22/1997	
o-Xylene	8260	ND	62,000	µg/Kg	12/22/1997	
m & p-Xylene	8260	ND	62,000	µg/Kg	12/22/1997	
PCB 8080 (soil)						
Extraction Date					12/22/1997	
Dilution Factor		1			12/22/1997	
Aroclor 1016	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1260	8080	ND	0.05	mg/Kg	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	12/15/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	12/15/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	12/15/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	25	mg/Kg	12/17/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	12/17/1997	
as Kerosene	NWTPH-Dx	ND	25	mg/Kg	12/17/1997	
8260 GC/MS (soil)		-				
Acetone	8260	ND	1,500	µg/Kg	12/22/1997	
Benzene	8260	ND	620	µg/Kg	12/22/1997	
Bromobenzene	8260	ND	620	µg/Kg	12/22/1997	
Bromochloromethane	8260	ND	620	µg/Kg	12/22/1997	
Bromodichloromethane	8260	ND	620	µg/Kg	12/22/1997	
Bromoform	8260	ND	620	µg/Kg	12/22/1997	
Bromomethane	8260	ND	620	µg/Kg	12/22/1997	
2-Butanone	8260	ND	1,200	µg/Kg	12/22/1997	
n-Butylbenzene	8260	ND	620	µg/Kg	12/22/1997	
sec-Butylbenzene	8260	ND	620	µg/Kg	12/22/1997	
tert-Butylbenzene	8260	ND	620	µg/Kg	12/22/1997	
Carbon Tetrachloride	8260	ND	620	µg/Kg	12/22/1997	
Chlorobenzene	8260	ND	620	µg/Kg	12/22/1997	
Chloroethane	8260	ND	620	µg/Kg	12/22/1997	
Chloroform	8260	ND	620	µg/Kg	12/22/1997	
Chloromethane	8260	ND	620	µg/Kg	12/22/1997	
2-Chlorotoluene	8260	ND	620	µg/Kg	12/22/1997	
4-Chlorotoluene	8260	ND	620	µg/Kg	12/22/1997	
1,2-Dibromo-3-chloropropane	8260	ND	620	µg/Kg	12/22/1997	
1,2-Dibromoethane	8260	ND	620	µg/Kg	12/22/1997	
Dibromochloromethane	8260	ND	620	µg/Kg	12/22/1997	
Dibromomethane	8260	ND	620	µg/Kg	12/22/1997	
1,2-Dichlorobenzene	8260	ND	620	µg/Kg	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8260 GC/MS con't		-				
1,3-Dichlorobenzene	8260	ND	620	µg/Kg	12/22/1997	
1,4-Dichlorobenzene	8260	ND	620	µg/Kg	12/22/1997	
Dichlorodifluoromethane	8260	ND	620	µg/Kg	12/22/1997	
1,1-Dichloroethane	8260	ND	620	µg/Kg	12/22/1997	
1,2-Dichloroethane	8260	ND	620	µg/Kg	12/22/1997	
1,1-Dichloroethene	8260	ND	620	µg/Kg	12/22/1997	
cis-1,2-Dichloroethene	8260	ND	620	µg/Kg	12/22/1997	
trans-1,2-Dichloroethene	8260	ND	620	µg/Kg	12/22/1997	
1,2-Dichloropropane	8260	ND	620	µg/Kg	12/22/1997	
1,3-Dichloropropane	8260	ND	620	µg/Kg	12/22/1997	
2,2-Dichloropropane	8260	ND	620	µg/Kg	12/22/1997	
trans-1,3-Dichloropropene	8260	ND	620	µg/Kg	12/22/1997	
1,1-Dichloropropene	8260	ND	620	µg/Kg	12/22/1997	
cis-1,3-Dichloropropene	8260	ND	620	µg/Kg	12/22/1997	
Ethyl benzene	8260	ND	620	µg/Kg	12/22/1997	
Freon 113	8260	ND	620	µg/Kg	12/22/1997	
Hexachlorobutadiene	8260	ND	620	µg/Kg	12/22/1997	
Isopropylbenzene	8260	ND	620	µg/Kg	12/22/1997	
p-Isopropyltoluene	8260	ND	620	µg/Kg	12/22/1997	
Methylene Chloride	8260	ND	620	µg/Kg	12/22/1997	
Naphthalene	8260	ND	620	µg/Kg	12/22/1997	
n-Propylbenzene	8260	ND	620	µg/Kg	12/22/1997	
Styrene	8260	ND	620	µg/Kg	12/22/1997	
1,1,1,2-Tetrachloroethane	8260	ND	620	µg/Kg	12/22/1997	
1,1,2,2-Tetrachloroethane	8260	ND	620	µg/Kg	12/22/1997	
Tetrachloroethene	8260	ND	620	µg/Kg	12/22/1997	
1,2,3-Trichlorobenzene	8260	ND	620	µg/Kg	12/22/1997	
1,2,4-Trichlorobenzene	8260	ND	620	µg/Kg	12/22/1997	
1,1,1-Trichloroethane	8260	ND	620	µg/Kg	12/22/1997	
1,1,2-Trichloroethane	8260	ND	620	µg/Kg	12/22/1997	
Trichloroethene	8260	ND	620	µg/Kg	12/22/1997	
Trichlorofluoromethane	8260	ND	620	µg/Kg	12/22/1997	
1,2,3-Trichloropropane	8260	ND	620	µg/Kg	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
8260 GC/MS con't		-				
1,2,4-Trimethylbenzene	8260	ND	620	µg/Kg	12/22/1997	
1,3,5-Trimethylbenzene	8260	ND	620	µg/Kg	12/22/1997	
Toluene	8260	ND	620	µg/Kg	12/22/1997	
Vinyl chloride	8260	ND	620	µg/Kg	12/22/1997	
o-Xylene	8260	ND	620	µg/Kg	12/22/1997	
m & p-Xylene	8260	ND	620	µg/Kg	12/22/1997	
PCB 8080 (soil)						
Aroclor 1016	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1221	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1232	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1242	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1248	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1254	8080	ND	0.05	mg/Kg	12/22/1997	
Aroclor 1260	8080	ND	0.05	mg/Kg	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

Sample I.D.

3-UST3-3

Lab I.D.

970348-1

Bromofluorobenzene (Surr.)	NWTPH-HCID	MI	12/15/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	MI	12/15/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	Dil	12/17/1997
Toluene-d8 (Surr.)	8260	Dil	12/22/1997
Bromofluorobenzene (Surr.)	8260	Dil	12/22/1997
1,2-Dichloroethane-d4 (Surr.)	8260	Dil	12/22/1997
Decachlorobiphenyl (Surr.)	8080	75 %	12/22/1997
Tetrachlorometaxylene (Surr.)	8080	73 %	12/22/1997

Sample I.D.

Method Blank

Bromofluorobenzene (Surr.)	NWTPH-HCID	106 %	12/15/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	101 %	12/15/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	95 %	12/17/1997
Toluene-d8 (Surr.)	8260	89 %	12/22/1997
Bromofluorobenzene (Surr.)	8260	87 %	12/22/1997
1,2-Dichloroethane-d4 (Surr.)	8260	87 %	12/22/1997
Decachlorobiphenyl (Surr.)	8080	100 %	12/22/1997
Tetrachlorometaxylene (Surr.)	8080	95 %	12/22/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	998.3	982.5	98.4	mg/Kg	12/17/1997	
as Lube Oil	510.3	480.7	94.2	mg/Kg	12/17/1997	
as Kerosene	544.0	575.2	105.7	mg/Kg	12/17/1997	
8260 GC/MS (soil)						
Chloroform	50.0	48.5	97.0	µg/Kg	12/22/1997	
1,1-Dichloroethene	50.0	50.5	101.0	µg/Kg	12/22/1997	
1,2-Dichloropropane	50.0	45.9	91.8	µg/Kg	12/22/1997	
Ethyl benzene	50.0	46.5	93.0	µg/Kg	12/22/1997	
Toluene	50.0	47.1	94.2	µg/Kg	12/22/1997	
Vinyl Chloride	50.0	48.0	96.0	µg/Kg	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
8260 GC/MS (soil)									
Benzene	25,000	ND	20,700	82.8	20,700	82.8	0.0	12/22/1997	
Chlorobenzene	25,000	ND	20,900	83.6	21,900	87.6	4.7	12/22/1997	
1,1-Dichloroethene	25,000	ND	20,700	82.8	20,500	82.0	1.0	12/22/1997	
Trichloroethene	25,000	ND	21,400	85.6	21,800	87.2	1.9	12/22/1997	
Toluene	25,000	ND	20,600	82.4	21,600	86.4	4.7	12/22/1997	
PCB 8080 (soil)									
Aroclor 1260	0.978	ND	0.631	64.5	0.604	63.5	1.6	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWPH-Dx (soil)								
as Diesel	170.0	169.3	100.0	--	--	--	12/17/1997	
as Lube Oil	170.0	151.3	89.01	--	--	--	12/17/1997	
PCB's 8080								
Aroclor 1254	0.928	0.812	87.5	0.846	88.0	0.6	12/22/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970348
 Project No: 4080600119/4401
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	12/16/1997	
as Diesel	ND	ND		mg/Kg	12/16/1997	
as Lube Oil	OIL	OIL		mg/Kg	12/16/1997	
NWTPH-Dx (soil)						
as Diesel	11,000	11,000	0.0	mg/Kg	12/17/1997	
as Lube Oil	ND	ND		mg/Kg	12/17/1997	

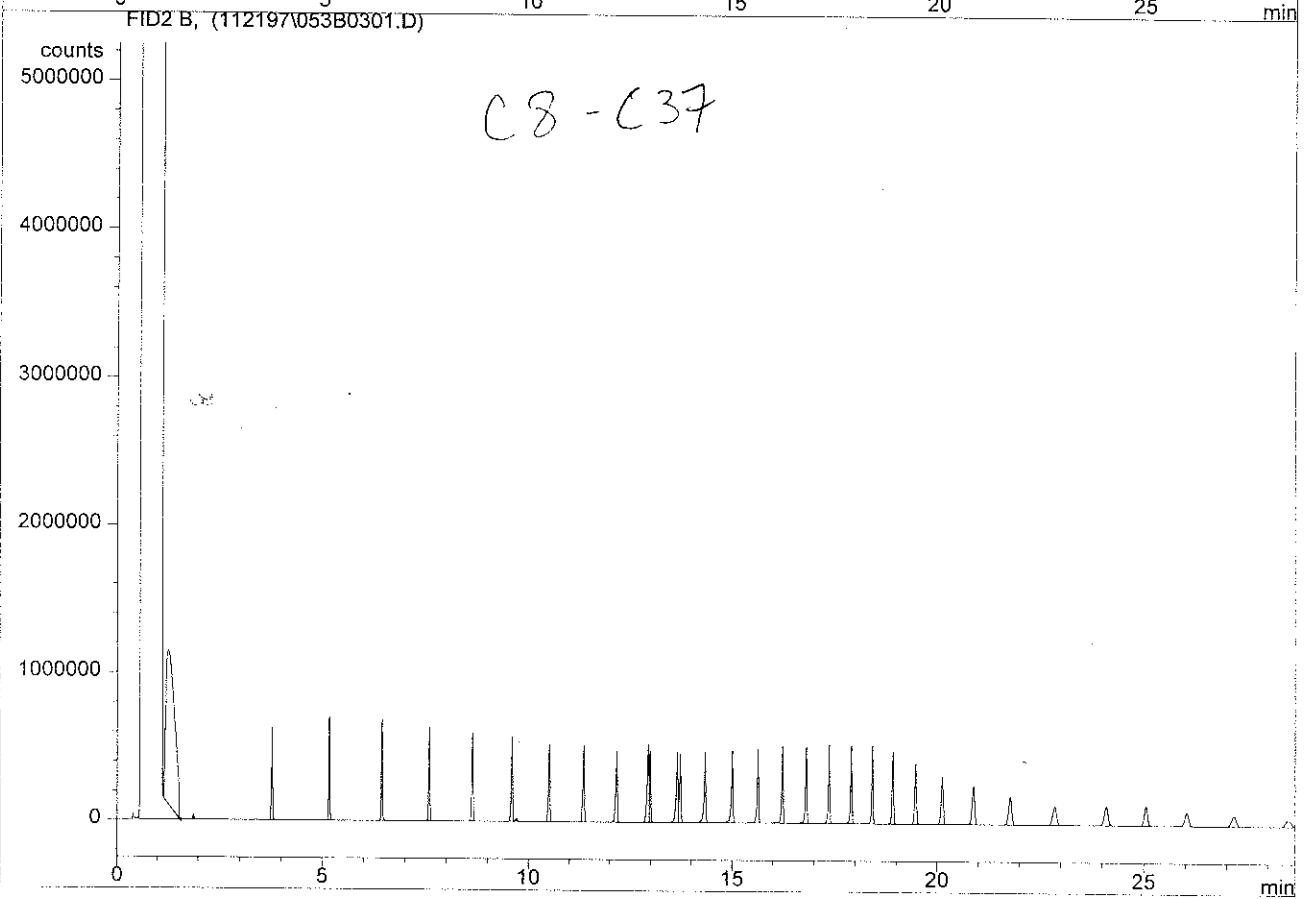
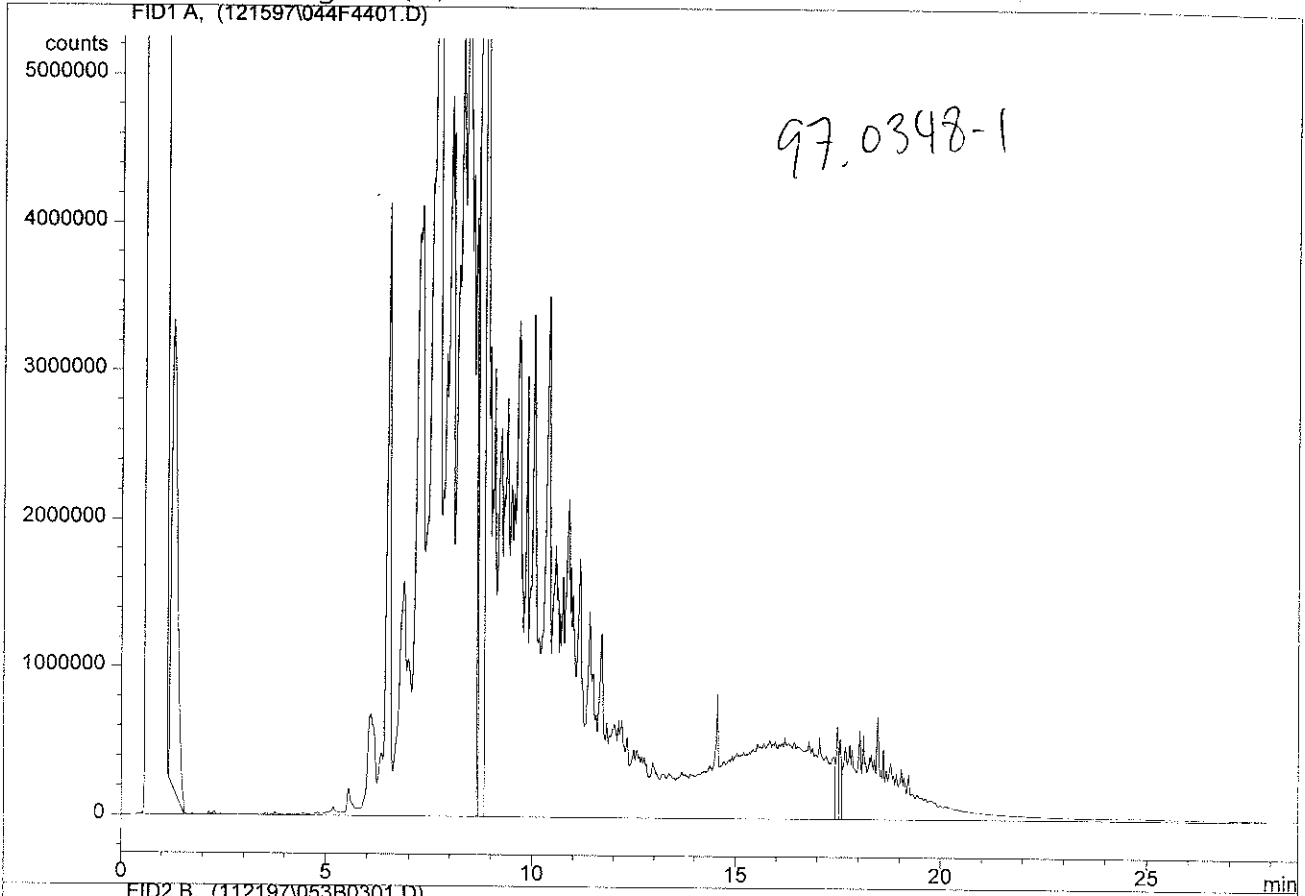
NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation.

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate-RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

Current Chromatogram(s)





Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
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December 29, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970368
Project No: 4080600119/4201
Project Name: Salem - Court House Square

The following samples were received on December 19, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Sampled</u>
970368-1	3-UST2-2-9.0'	Soil	12/19/1997
970368-2	3-UST3-2-9.5'	Soil	12/19/1997
970368-3	1-UST5-2-9.5'	Soil	12/19/1997
970368-4	1-UST6-2-9.5'	Soil	12/19/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970368
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST2-2-9.0'	970368-1	12/19/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	91	0.01	%	12/22/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/20/1997	
Dilution Factor		1			12/20/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	12/20/1997	
as Diesel	NWTPH-HCID	ND	55	mg/Kg dry wt	12/20/1997	
as Lube Oil	NWTPH-HCID	ND	110	mg/Kg dry wt	12/20/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST3-2-9.5'	970386-2	12/19/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	78	0.01	%	12/22/1997	
NWTPH-Dx (soil)						
Extraction Date					12/22/1997	
Dilution Factor		1			12/23/1997	
as Diesel	NWTPH-Dx	250	19	mg/Kg dry wt	12/23/1997	A1
as Lube Oil	NWTPH-Dx	ND	64	mg/Kg dry wt	12/23/1997	
as Kerosene	NWTPH-Dx	200	19	mg/Kg dry wt	12/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970368
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-UST5-2-9.5'	970368-3	12/19/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	89	0.01	%	12/22/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/20/1997	
Dilution Factor		1			12/20/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	12/20/1997	
as Diesel	NWTPH-HCID	ND	56	mg/Kg dry wt	12/20/1997	
as Lube Oil	NWTPH-HCID	ND	112	mg/Kg dry wt	12/20/1997	

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
1-UST6-2-9.5'	970386-4	12/19/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	88	0.01	%	12/22/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/20/1997	
Dilution Factor		1			12/20/1997	
as Gasoline	NWTPH-HCID	ND	23	mg/Kg dry wt	12/20/1997	
as Diesel	NWTPH-HCID	ND	57	mg/Kg dry wt	12/20/1997	
as Lube Oil	NWTPH-HCID	ND	114	mg/Kg dry wt	12/20/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970368
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	12/20/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	12/20/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	12/20/1997	
NWTPH-Dx (soil)						
as Diesel	NWTPH-Dx	ND	15	mg/Kg	12/23/1997	
as Lube Oil	NWTPH-Dx	ND	50	mg/Kg	12/23/1997	
as Kerosene	NWTPH-Dx	ND	15	mg/Kg	12/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970375
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST2-2-9.0'	970368-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID	96 %	12/20/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	97 %	12/20/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST3-2-9.5'	970368-2		
ortho-terphenyl (Surr.)	NWTPH-Dx	110 %	12/23/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-UST5-2-9.5'	970368-3		
Bromofluorobenzene (Surr.)	NWTPH-HCID	92 %	12/20/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	99 %	12/20/1997
<u>Sample I.D.</u>	<u>Lab I.D.</u>		
1-UST6-2-9.5	970368-4		
Bromofluorobenzene (Surr.)	NWTPH-HCID	95 %	12/20/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	96 %	12/20/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID	102 %	12/20/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	100 %	12/20/1997
ortho-terphenyl (Surr.)	NWTPH-Dx	102 %	12/23/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970375
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-Dx (soil)						
as Diesel	998.3	1,082	108.4	mg/Kg	12/23/1997	
as Lube Oil	510.3	560.4	109.8	mg/Kg	12/23/1997	
as Kerosene	544.0	567.4	104.3	mg/Kg	12/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970375
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWPH-Dx (soil) as Diesel	170.0	175.0	102.9	--	--	--	12/23/1997	
as Lube Oil	170.0	187.0	110.0	--	--	--	12/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970368
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	12/20/1997	
as Diesel	ND	ND		mg/Kg	12/20/1997	
as Lube Oil	ND	ND		mg/Kg	12/20/1997	
NWTPH-Dx (soil)						
as Diesel	250	200	22.2	mg/Kg	12/23/1997	MP
as Lube Oil	ND	ND		mg/Kg	12/23/1997	
as Kerosene	200	170	16.2	mg/Kg	12/23/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation.

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.



Specialty Analytical

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December 29, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970375
Project No: 4080600119/4201
Project Name: Salem - Court House Square

The following sample was received on December 23, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Sampled</u>
970375-1	3-UST1-2-10.0'	Soil	12/22/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970375
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
3-UST1-2-10.0'	970375-1	12/22/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
Total Solids	160.3	92	0.01	%	12/26/1997	
NWTPH-HCID (soil)						
Extraction Date		-			12/24/1997	
Dilution Factor		1			12/24/1997	
as Gasoline	NWTPH-HCID	ND	22	mg/Kg dry wt	12/24/1997	
as Diesel	NWTPH-HCID	ND	54	mg/Kg dry wt	12/24/1997	
as Lube Oil	NWTPH-HCID	ND	109	mg/Kg dry wt	12/24/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970375
 Project No: 4080600119/4201
 Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
 Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	NWTPH-HCID	ND	20	mg/Kg	12/24/1997	
as Diesel	NWTPH-HCID	ND	50	mg/Kg	12/24/1997	
as Lube Oil	NWTPH-HCID	ND	100	mg/Kg	12/24/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970375
Project No: 4080600119/4201
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
3-UST1-2-10.0'	970375-1		
Bromofluorobenzene (Surr.)	NWTPH-HCID	99 %	12/24/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	102 %	12/24/1997

<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	NWTPH-HCID	97 %	12/24/1997
ortho-terphenyl (Surr.)	NWTPH-HCID	99 %	12/24/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970375
Project No: 4080600119/4201
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
NWTPH-HCID (soil)						
as Gasoline	ND	ND		mg/Kg	12/24/1997	
as Diesel	ND	ND		mg/Kg	12/24/1997	
as Lube Oil	ND	ND		mg/Kg	12/24/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation.

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

APPENDIX C
DISPOSAL RECEIPTS

THE SUPERMARKET LAMPING ETC.

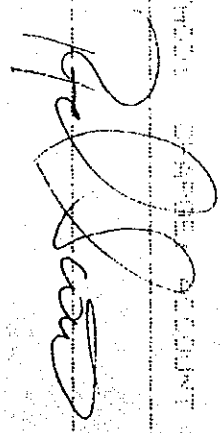
TEL: 444 4444

ADDRESS: 1000 BROADWAY, INC. MARION COUNTY
 3000 W. HIGHWAY 100
 COLUMBIA, MO 65201
 PHONE: (800) 231-2311
 FAX: (800) 231-2311
 MANUAL TICKETS: 0/0

CREDIT: 1000 BROADWAY, INC. MARION COUNTY
 ORDER TO: GR - MAR - HALLER TICKET NUMBER:
 PERMIT: 1000 BROADWAY, INC. MARION COUNTY
 ORDER: 1000 BROADWAY, INC. MARION COUNTY
 ORDER: 1000 BROADWAY, INC. MARION COUNTY
 ORDER: 1000 BROADWAY, INC. MARION COUNTY

ORDER: 1000 BROADWAY, INC. MARION COUNTY

ORDER: 1000 BROADWAY, INC. MARION COUNTY



THE QUEENSLAND RAILWAY LONDON TELEGRAPH

YALH 21.4.28

214428

SUBSIDIANI OF SALES, INC. PARSON COUNTY

345 ON HIGHWAY 13 CUSTOMER ACCT# 500033

CHICKENHILLS, CO VEHICLE ID# PAR1397

PHONE: 703-873-8796 TIME: 11:06 DATE: 22/04/2008

ISSUED BY: JLN MANUAL TICKETS: N/A

AMOUNT: 1.00 CONT. FEE 2001 PERMIT FEE

MAILED: 21.4.28 MAILED TICKET NUMBER: 214428

CUPID: 134 28 745 19.40 (36500) NET: 21.02 (42040)

PERM: 134 28 745 19.40 (36500) NET: 21.02 (42040)

AGENT METHOD: CHARGE: ACCOUNT FEE

SIGNATURE: *P. Gomez* *Steid*

WILDERBEND LANDFILL

TRK# 209514

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCINNIVILLE, OR 97129
PHONE# (503) 472-8788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 13:35 DATE: 10/28/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: 92-31
SOURCE ID: DR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY
TONS(LBS): GROSS: 49.59(\$9180) TARE: 17.71(\$35420) NET: 31.88(\$3760)
CURB-YARDS: 30.0

PO# PERMIT #455
HAULER TICKET NUMBER:

PROJ#: KH

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE:



PERMIT # 209502

TRUCK # 209502

SUBSIDIARY OF SANIFILL, INC.

3489 SW HIGHWAY 18
CHINNIVILLE, OR 97128

PHONE# (503)472-8788
REPAIRED BY: KN

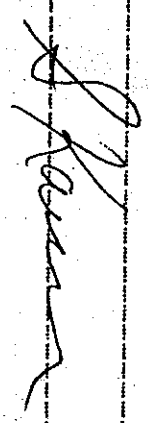
MODITY: CONT/SOIL

HAULER: L-10

OR - MAR -

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE:



MARION COUNTY

CUSTOMER ACCT# 5091397

VEHICLE ID# MAR1397
TIME: 13:13 DATE: 10/28/1997
MANUAL TICKET# N/A

PO#: PERMIT #455

HAULER TICKET NUMBER:

NAME: MARION COUNTY
TARE: 19.30(38600) NET: 28.22(56440)

PROJ#: KH

GROSS: 47.52(95040)

WEIGHT: 30.0

REIUEBRENND LANDFILL

T L K H 209501

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCHINNIVILLE, OR 97128
PHONE# (503)472-8788

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 13:07 DATE: 10/28/1997
MANUAL TICKET# N/A

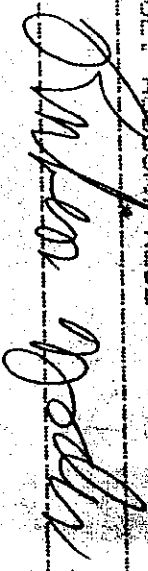
COMMODITY: CONT/SOIL

PO#: PERMIT #455
HAULER TICKET NUMBER:

HAULER: 96-75
SOURCE ID: DR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY PROJ#: KH
TONS(LBS): GROSS: 44,31(88620) TARE: 17.05(34100) NET: 27.26(54520)
CURB YARDS: 30.0

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE:



Sup

PERMIT - DUPLICATE TICKET
RIVERBEND LANDFILL TIK# 209498

A SUBSIDIARY OF SANIFILL, INC.
13489 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-6788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 13:02 DATE: 10/28/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL POH: PERMIT #455
HAULER: 92-25 HAULER TICKET NUMBER:
SOURCE ID: OR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY PROJ# KH
TONS: GROSS: 44.50 TARE: 19.40 NET: 25.10 NET LBS: 50200
RATE: 27.470 / TON QNTY: 25.10 PRETAX CHARGE: 589.43
PAYMENT METHOD: CHARGE: ACCOUNT RECE PAYMENT TOTAL: 689.50

TOTAL OF ALL COMMODITIES: \$589.43
TOTAL OF ALL EXTRA CHARGES: \$0
TOTAL OF ALL TAXES AND FEES: \$100.07

GRAND TOTAL OF ALL CHARGES: \$689.50
=====

SIGNATURE: _____

RIVERBEND LANDFILL

TICKET# 209495

A SUBSIDIARY OF SANIFILL, INC.
13465 SW HIGHWAY 18
TOMMINVILLE, OR 97128
PHONE# (503)472-8789
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 12:55 DATE: 10/28/1997
MANUAL TICKET# N/A

MODITY: CONT/SOIL
HAULER: 93
SOURCE ID: OR - MAR -
PO#: PERMIT #455
HAULER TICKET NUMBER:
PERMITS: #455 NAME: MARION COUNTY
TONS(LBS): GROSS: 44,33(88660) TAKE: 17.36(34720) NET: 26.97(53940)
CUBIC YARDS: 30.0
PROJ#: KH

PAYMENT METHOD: CHARGE: ACCOUNT HERE

SIGNATURE:



PERMIT LANDFILL

1 2 1 9 7 1

A SUBSIDIARY OF SANIFILL, INC.
13499 SW HIGHWAY 18
MCKINNVILLE, OH 43126
PHONE# 503/472-8789
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 0091397
VEHICLE ID# 041977
TIME: 5:35 DATE: 11/11/99
MANUAL TICKET# N/A

COMMODITY: CONT/SCILL PO#: PERMIT #422
HAULER: TR HAULER TICKET NUMBER:
SOURCE ID: OR - MAR -
SEMI PERMIT #425 NAME: MARION COUNTY PROJ#: 04
TONS(LBS): GROSS: 45,40(91200) TARE: 17.26(34520) NET: 28.14(56680)
CURIC YARIST: A.C.D.

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE: 

RESERVED LANDFILL

T 2 4 # 2 1 2 7 2

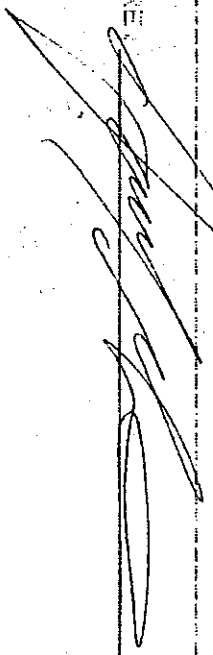
A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MEMPHISVILLE, OR 97129
PHONE# (503)472-8789
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME# 0137 DATE# 11/11/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: 3
SOURCE: 101 OF - MAR -
GENL PERMIT #425 NAME: MARION COUNTY
TONS (LBS): GROSS: 49.79 (97590) TARE: 20.24 (40690) NET: 28.55 (57100)
CURB YARDS: 30.0

PAYMENT METHOD: CHECK; ACCOUNT RECE

SIGNATURE:



PERMIT # 1214378

ISSUE DATE 12/14/97

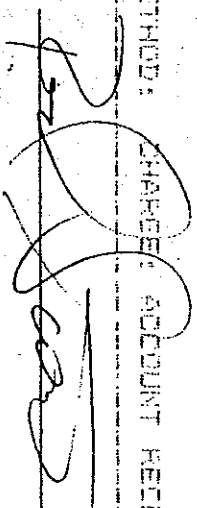
A SUBSIDIARY OF SWINFIELD, INC.
13425 SW HIGHWAY 13
MEMPHISVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MPR1297
TIME: 9:48 DATE: 11/11/1997
MANUAL TICKET# N/A

COMMODITY: CONT. 2011
HAULER: 13
SOURCE ID: DR - MAR -
SECT PERMIT #495 NAME: MARION COUNTY
TONE (LBS.): CROSS: 4910098800 TAPE: 19151030200 NET: 29189159200
CURIC: YARDE: 80.0

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE:



PREPARED LANDFILL

T L 400 21 400

A SUBSIDIARY OF SANIFILL, INC.
13429 SW HIGHWAY 16
MCKINNVILLE, OR 97129
PHONE (503) 472-8788
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5191397
VEHICLE ID# MAR1397
TIME: 10:15 DATE: 11/11/99
MANUAL TICKET# N/A

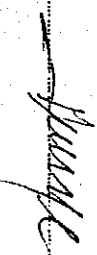
COMMODITY: CONT/SOIL
HAULER: 75
SOURCE ID: OR - MAR -

COM: PERMIT 4455
HAULER TICKET NUMBER:

GEN: PERMIT 4455 NAME: MARION COUNTY
TONS: GROSS: 46.63 (93260) TARE: 27.21 (54420) NET: 29.42 (58840)
CURR: VARS: 60.0

PAYMENT METHOD: CHARGE; ACCOUNT RECE

SIGNATURE:



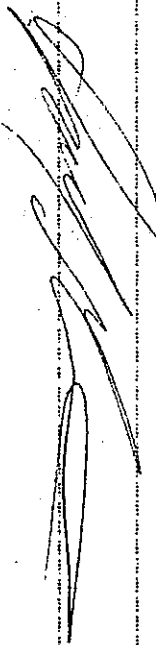
PAID BY: [unclear] LANDFILL T.L.L. T. L. K. H. 23.1.1.1.0

A SUBSIDIARY OF SANIFILL, INC. MARION COUNTY
13468 SW HIGHWAY 18 CUSTOMER ACCT# 5091397
MORNINGVILLE, OR 97128 VEHICLE ID# MAR1397
PHONE# 502)473-8788 TIME# 10:22 DATE# 11/11/99
PREPARED BY: EM MANUAL TICKETS# N/A

COMMODITY: CONT/SOIL P24: PERMIT #43E
HALLER# # HALLER TICKET NUMBER#
SOURCE ID# OR -- MAP --
GEN: PERMIT #43E NAME: MARION COUNTY P202# 84
TONS (LBS) (GROSS): 45,029,204(0) TARE# 20,177,402(0) NET# 25,851,817(0)
CURR YARDS: 40.7

PAYMENT METHOD: CHARGE ACCOUNT# 882E

SIGNATURE:



PREVIOUSLY PAID LAMPSON HILL

T. L. McPH 23.1.14.15

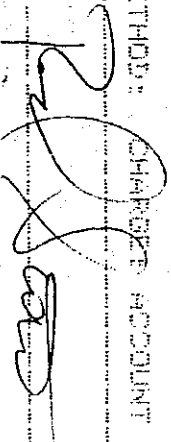
A SUBSIDIARY OF SANIFILL, INC.
13422 SW HIGHWAY 18
MCMINNVILLE, OR 97138
PHONE: (503) 473-3789
ISSUED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5011307
VEHICLE ID# 9461397
TIME 10:35 DATE 21/11/2007
MANUAL TICKET# N/A

COMMODITY: CONT SOIL
HALLER: 15
SOURCE ID: OR - MAR -
GEN: PERMIT WAGE NAME: MARION COUNTY
TONS LABEL: GROSS: 46.71193420 TARE: 19.47138940 NET: 27.24054480
CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE ACCOUNT FEE

SIGNATURE:



PERMIT # 97128

T.L.# 211449

910 to

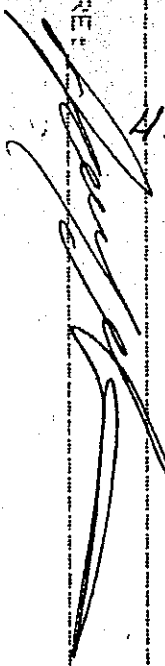
A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503) 478-8788
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 12:15 DATE: 11/11/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL FOM: PERMIT #455
HAULER: 9 HALER TICKET NUMBER:
SOURCE ID: DR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY PROJ#: KH
TONS(LBS): GROSS: 47.71(95420) TARE: 20.11(40220) NET: 27.60(55200)
CUBIC YARDS: 80.0

PAYMENT METHOD: CHARGE: ACCOUNT RECD

SIGNATURE:



RETIQUEFREEMND LANDFILL

TALK# 211456

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: EM

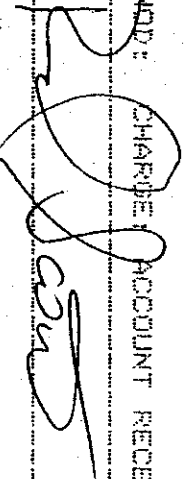
MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 12:33 DATE: 11/11/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: 13
SOURCE ID: OR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY
TONS(LBS): GROSS: 44.08(88160) TARE: 19.40(38800) NET: 24.68(49360)
CUBIC YARDS: 60.0

PO#: PERMIT #455
HAULER TICKET NUMBER:

PAYMENT METHOD: CHARGE ACCOUNT RECE

SIGNATURE:



PERMITTED LANDFILL

T 1 K # 211443

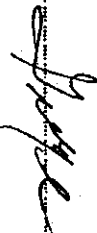
A SUBSIDIARY OF SANIFILL, INC.
13445 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 12:10 DATE: 11/11/1997
MANUAL TICKET# N/A

COMMODITY: CNT/SOIL PO#: PERMIT #455
HAULER: 75 HAULER TICKET NUMBER:
SOURCE ID: DR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY PROJ#: KH
TONS(LBS): GROSS: 50.49(100980) TARE: 17.16(34320) NET: 33.33(66660)
CURIC YARDS: 60.0

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE:



11/11

8

RIVERBEND LANDFILL

TICKET # 213455 ✓

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 11:04 DATE: 11/26/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: L-10

PO#: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

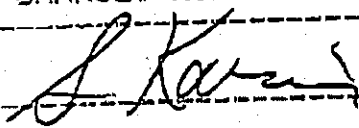
PROJ#: KH

GEN: PERMIT #455 NAME: MARION COUNTY

TONS(LBS): GROSS: 56.29(112580) TARE: 19.72(39440) NET: 36.57(73140)
CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE ACCOUNT RECE

SIGNATURE: _____



8

RIVERBEND LANDFILL

TICKET # 213440 ✓

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 9:47 DATE: 11/26/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: 9

PO#: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

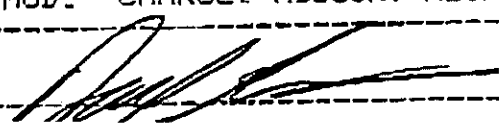
PROJ#: KH

GEN: PERMIT #455 NAME: MARION COUNTY

TONS(LBS): GROSS: 45.51(91020) TARE: 20.35(40700) NET: 25.16(50320)
CUBIC YARDS: 1.0

PAYMENT METHOD: CHARGE ACCOUNT RECE

SIGNATURE: _____



#8

RIVERBEND LANDFILL

TICKET# 213480 ✓

A SUBSIDIARY OF SANIFILL, INC.
13429 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: KH

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 11:33 DATE: 11/25/1997
MANUAL TICKET# N/A

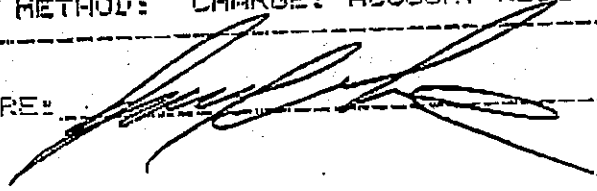
COMMODITY: CONT/SOIL
HAULER: L-8

PO#: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -
GEN: PERMIT #455 NAME: MARION COUNTY PROJ#: KH
TONS(LBS): GROSS: 48.50(97000) TARE: 20.41(40820) NET: 28.09(56180)
CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE: _____



#8

RIVERBEND LANDFILL

TICKET# 213478 ✓

A SUBSIDIARY OF SANIFILL, INC.
13429 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 11:15 DATE: 11/26/1997
MANUAL TICKET# N/A

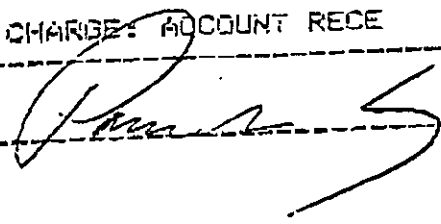
COMMODITY: CONT/SOIL
HAULER: ~~L-8~~

PO#: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR - PROJ#: KH
GEN: PERMIT #455 NAME: MARION COUNTY
TONS(LBS): GROSS: 54.48(108960) TARE: 18.62(37240) NET: 35.86(71720)
CUBIC YARDS: 10.0

PAYMENT METHOD: CHARGE: ACCOUNT RECE

SIGNATURE: _____



RIVERBEND LANDFILL

TRK# 213506

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 19
MEMPHISVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 12:53 DATE: 11/24/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: L-13

FOR: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

GEN: PERMIT #455 NAME: MARION COUNTY

PROJ#: KH

TONS(LBS): GROSS: 46.12(92240) TARE: 18.56(37120) NET: 27.56(55120)

CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE: ACCOUNT RECD

SIGNATURE:

RIVERBEND LANDFILL

TRK# 213495

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 19
MEMPHISVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 12:08 DATE: 11/26/1997
MANUAL TICKET# N/A

COMMODITY: CONT/SOIL
HAULER: 96-22

FOR: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

GEN: PERMIT #455 NAME: MARION COUNTY

PROJ#: KH

TONS(LBS): GROSS: 51.00(102000) TARE: 17.55(35100) NET: 33.45(66900)

CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE: ACCOUNT RECD

SIGNATURE:

#8

OVERBEND LANDFILL

TRK# 213510

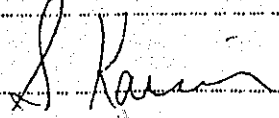
SUBSIDIARY OF SANIFILL, INC.
#63 SW HIGHWAY 18
WINNVILLE, OH 47129
PHONE (603) 472-8788
PREPARED BY: KN

MARION COUNTY
CUSTOMER ACCT# 6091397
VEHICLE ID# MAR1397
TIME: 12:58 DATE: 11/26/1997
MANUAL TICKET# N/A

COMMODITY: CONT. SOIL
POB: PERMIT #452
ALLER: 1-10
HAULER TICKET NUMBER:
ORCE ID: OF - PAF -
PR PERMIT #455 NAME: MARION COUNTY PROJ#: KH
GROSS WT: 50.41(100830) TARE: 19.57(39140) NET: 30.84(61580)
GROSS WT: 30.1

PAYMENT METHOD: CHARGE: ACCOUNT RECD

SIGNATURE



ISSUED BY: JAMES H. HARRIS

DATE: 11/14/99

A SUBSIDIARY OF SOUTHERN INDIANA
13425 SW HIGHWAY 137
MEMPHIS, TN 38119
PHONE: (901) 422-8333
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 507137
VEHICLE ID# M41129
TIME: 0154 DATE: 11-04-1999
MANUAL TICKET# N04

ADDITIONAL CONTACT: POB: PERMIT #495
NUMBER: 92 FAULTS TICKET NUMBER:

SOURCE: TRIP - MAP -
ISSUE PERMIT #495 NAME: MARION COUNTY PROGRAM: AH
TONE LABEL: 0805: 45, 44, 22501 TARE: 19, 23, 36440 NET: 23, 43, 48801
TARE: 19, 23, 36440

PAYMENT METHOD: CASH ACCOUNT RECE

SIGNATURE: *James H. Harris*

TRUCKS INCORPORATED
SUBSIDIARY OF DODD & CO. INC.
225 W. HIGHWAY 10
STANFORD, CA 94304
PHONE: (415) 353-2700
FAX: (415) 353-2700
MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE I# MAR1397
TIME: 311 DATE: 12/04/1997
MANUAL TICKET# N/A

POSTAL CONT/SOLD FROM: PERMIT #455
ALERT 74 HALLER TICKET NUMBER
JPOS III OR - 54
MARIAN COUNTY
NO. 1251 GROSS: 1125106000 TARIFF: 17.31(34520) NET: 24,94,32530
SITE: 112

PERMIT METHOD: CHARGE ACCOUNT REVE

INITIALS: *W.D.*

ST. JOHNSBURY, VT. 05475

7-1-64 21-9-63

QUESTIONS OF SERVICE, INC.

100 W. BROADWAY

ST. JOHNSBURY, VT. 05475

PHONE: 873-1111

FAX: 873-1111

TELETYPE: 873-1111

TELEFAX: 873-1111

TELETYPE: 873-1111

TELEFAX: 873-1111

TELETYPE: 873-1111

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POST REPORT DATE

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REPORT DATE

Debbie H.

UNRECORDED BY MAIL

TEL # 321 4 33 31

ASSOCIATES OF EASTERN, INC.
2001 W. HIGHWAY 13
CHICKENVILLE, TN 39115
PHONE: (505) 71-8788
REPAIRED BY: EN

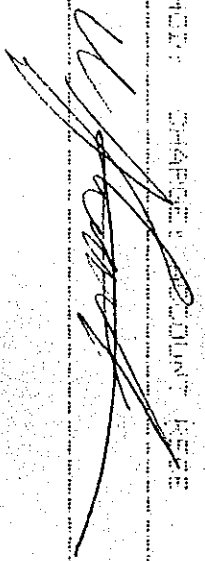
WAGON COUNTY
CUSTOMER ACCT# 502135
VEHICLE ID# 9461197
TIME: 9:17 DATE: 11/01/99
ANNUAL TICKETS: 0/0

PROD# 11 CONT/5011 4084 PERMIT #488
ALERT: 31 HALLER TICKET NUMBER:

CURCE 111 ON "YAP" NAME: WAGON COUNTY PROD# 11
ENV PERMIT #488 WAGON COUNTY TAPER: 17.871351400 NET: 24.00000000
ONLINE: 1 OFFER: 22.157100445

AGENT METHOD: SHAPOR: ACCOUNT #488

SIGNATURE:



STANDARD RECEIPT

DATE: 11/15/88

ISSUED BY: [Name]

MAJION COUNT

ISSUED TO: [Name]

CUSTOMER ACCT# 809130

ISSUED FOR: [Name]

VEHICLE ID# 001387

ISSUED FOR: [Name]

TIME: 8:15 AM DATE: 11/15/88

ISSUED FOR: [Name]

MANUAL TICKET NO.

ISSUED FOR: [Name]

PCA PERMIT #482

ISSUED FOR: [Name]

HAULER TICKET NUMBER:

ISSUED FOR: [Name]

PROJECT: [Name]

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

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ISSUED FOR: [Name]

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ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

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NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

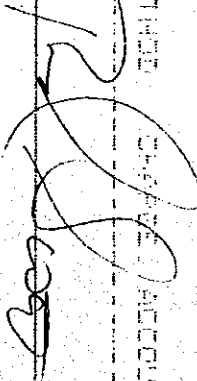
NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

SIGNATURE: 

STANDARD RECEIPT

DATE: 11/15/88

ISSUED BY: [Name]

MAJION COUNT

ISSUED TO: [Name]

CUSTOMER ACCT# 809130

ISSUED FOR: [Name]

VEHICLE ID# 001387

ISSUED FOR: [Name]

TIME: 8:15 AM DATE: 11/15/88

ISSUED FOR: [Name]

MANUAL TICKET NO.

ISSUED FOR: [Name]

PCA PERMIT #482

ISSUED FOR: [Name]

HAULER TICKET NUMBER:

ISSUED FOR: [Name]

PROJECT: [Name]

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

ISSUED FOR: [Name]

NET: \$1,000.00

11/14/81 11:43 AM

11/14/81 11:43 AM

DEPARTMENT OF TRANSPORTATION

MARION COUNTY

STATE OF OHIO

CUSTOMER ACCT# 9091297

VEHICLE REGISTRATION

VEHICLE ID# W081397

REGISTRATION FEE

TIN# 9125 DATE 12/04/1980

SALES TAX

HANDL TICKET# N/A

PROPERTY TAX

POP. BENEFIT #488

SALES TAX

PAULSEN TICKET NUMBER:

SALES TAX

PROFIT: 04

SALES TAX

NET: 56.28 (72360)

SALES TAX

NET: 56.28 (72360)

SALES TAX

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SALES TAX

NET: 56.28 (72360)

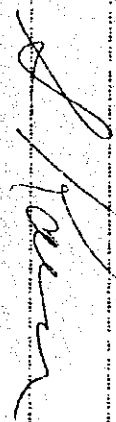
De

A SUBSECTION OF SANITARY INC. MARION COUNTY
1345 S HIGHWAY 15 CUSTOMER ACCT# 5091797
MEMPHIS, TN 38118 VEHICLE ID# 4447257
SHONER, BOB LEE DATE# 12/04/1999
PREPARED BY: EN MANDAL TICKETS# N/A

AMOUNT CONTAINED FOR PERMIT FEE
NUMBER 10 PAULSON TICKET NUMBER
SOURCE IS OF TYPE
SENT PERMIT TO NAME MARION COUNTY FEE# 001 NM
TOWNSHIP ORIGIN AND LICENSED TARE# 19, 51, 99, 050, NET# 50, 53, 93, 550,
FURT# 00001, 1, 0

PAYMENT METHOD: CHARGE ACCOUNT FEE

STATE OF MISSISSIPPI



UNRECORDED LANDOFF BILL

7 1 6 14 21 of 39 2

SUBSIDIAN OF SANITIZED INC

MARION COUNTY

ISSUE BY PERMIT 13

CUSTOMER ACCT# 801100

NO. OF PERMITS 1

VEHICLE INV #00111

PERMIT #00111

TIME: 7:12 DATE: 11 Jan 1989

PERMIT BY

HANDL TICKETS 00

AMOUNT 1000.00

POST PERMIT #000

PERMIT 13

HANDL TICKET NUMBER

SOURCE 01 OF MAP

GEN PERMIT 0000 NAME: MARION COUNTY

PROT# 00

GEN PERMIT 0000 441 2018 24000 TARI: 18.191345000

NET 00.000000000

GEN PERMIT 0000

PERMIT METHOD: CASH: ACCOUNT FEES


Pamela Stee

PERMIT TO OPERATE MOTOR VEHICLE

T. J. H. H. 2014 03 09

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
MOTOR VEHICLE PERMITTING
MOTOR VEHICLE REGISTRATION
MOTOR VEHICLE TAXES
MOTOR VEHICLE LICENSES
MOTOR VEHICLE SAFETY
MOTOR VEHICLE INSURANCE
MOTOR VEHICLE REPAIRS
MOTOR VEHICLE MAINTENANCE

PERMIT TYPE: REGISTRATION
VEHICLE ID# 9811397
DATE: 03/09/2014
ISSUED: 03/09/2014
EXPIRES: 03/09/2015
PLATE: 9811397
REGISTRATION FEE: \$150.00
SALES TAX: \$150.00
TOTAL: \$300.00
NET: \$150.00

PAYMENT METHOD: CASH
ACCOUNT RECEIPT
SIGNATURE: 

NO. 1, 1990-1991

7 1 16 19 22 1 4 0 5

CONCRETE OF BARTON, INC.

BARTON COUNTY

1000 W. HIGHWAY 19

CUSTOMER ACCT# 500139

MONROVILLE, OR 97138

VEHICLE ID# MAR129

PHONE: 503-725-8788

TIME: 10:02 DATE: 11-14-1997

PREPARED BY: LK

MANUAL TICKETS: N/A

COMPETITOR: CONTEC

FORM PERMIT #452

HAULER #2

HAULER TICKET NUMBER:

ADDRESS: OR - MAP -

SECTION: VA

DETA PERMIT ASSE

NAME: BARTON COUNTY

TOWNSHIP: ORGAS

TAPER: 10, 53, 350, 300

NET: 27, 27, 27, 27

DATE: 11-14-1997

BY: [Signature]

RECEIVED

PARSONS ELECTRIC CO. LANDINGS I L L

7' 5' 44" 22' 1' 44" 02

ADDRESS OF EMPLOYEE
CITY AND STATE
CITY AND STATE
CITY AND STATE

PARSON COUNTY
CUSTOMER ACCT# 5091395
SCHEDULE ID# PAR137
TIME# 3157 DATE# 11/04/1998
MANUAL TICKET# N/A

PHONE COMPANY
PHONE NUMBER
ADDRESS OF EMPLOYEE
CITY AND STATE
CITY AND STATE
CITY AND STATE

PHONE NUMBER
CITY AND STATE
CITY AND STATE
CITY AND STATE

PHONE NUMBER
CITY AND STATE
CITY AND STATE
CITY AND STATE

Signature: *D. Schick*

ST. JAMES BROS. CO. LONDON, ENGL.

TRADE MARK REGISTERED

ST. JAMES BROS. CO. LONDON, ENGL.
ST. JAMES BROS. CO. LONDON, ENGL.
ST. JAMES BROS. CO. LONDON, ENGL.
ST. JAMES BROS. CO. LONDON, ENGL.

NATION COUPON
CUSTOMER ACCT# 5001300
VEHICLE ID# 0000000
TIME 0100 DATE 01 01 1997
MANUAL TICKETS 00

ST. JAMES BROS. CO. LONDON, ENGL.
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ST. JAMES BROS. CO. LONDON, ENGL.
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ST. JAMES BROS. CO. LONDON, ENGL.
ST. JAMES BROS. CO. LONDON, ENGL.
ST. JAMES BROS. CO. LONDON, ENGL.

William J. ...

RECEIVED BY: [Name]

DATE: [Date]

TIME: [Time]

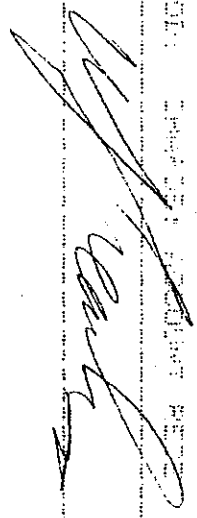
1. IDENTIFY: [Name], INC.
2. 2344 SW HIGHWAY 11
3. OPLANDS, OK 74133
4. PHONE: (505) 231-1741
5. FAX: (505) 231-1741

WARREN COUNTY
CUSTOMER ACCT# 5001330
VEHICLE 13# MAF1394
TITLE 1140 EXPIR 12/04/1999
MANUAL LICENSE NO. 4

PROPERTY: CONT 0.11 ACRES
POLICE: 92-31
SOURCE: 111 OR - 7401-1
ITEM: PERMIT 4.000
TOWNSHIP: 500001 (11.1038100) TARE: 17,451,349.250 NET: 24,710,827.00
TARE: 100001 20.0

AGENT METHOD: [Name]

AGENT: [Name]



FRIDAY, APRIL 11, 1997

7:14 PM 31.44 3.1

* BUREAU OF INDIANA STATE POLICE
 1000 W. WASHINGTON ST.
 INDIANAPOLIS, IN 46204
 PHONE: (317) 232-1100
 FAX: (317) 232-1101
 * BUREAU OF INDIANA STATE POLICE
 1000 W. WASHINGTON ST.
 INDIANAPOLIS, IN 46204
 PHONE: (317) 232-1100
 FAX: (317) 232-1101

POLICE: JON SUZUKI
 HALL: 44-72
 SOURCE: 01 OF 005
 ICA: PERMIT # 44-72-0001
 ICA: PERMIT # 44-72-0001
 ICA: PERMIT # 44-72-0001
 ICA: PERMIT # 44-72-0001

ICA: PERMIT # 44-72-0001
 ICA: PERMIT # 44-72-0001
 ICA: PERMIT # 44-72-0001
 ICA: PERMIT # 44-72-0001

John P. ...

PAID BY: [unclear] LICENSE: [unclear] T. H. [unclear] [unclear]

APPROPRIATE AGENCY: [unclear] TOLSON COUNTY
CUSTOMER ACCOUNT NUMBER: [unclear]
VEHICLE IDA NUMBER: [unclear]
TIME: [unclear] DATE: [unclear]
ISSUED BY: [unclear]

APPROPRIATE AGENCY: [unclear] TOLSON COUNTY
CUSTOMER ACCOUNT NUMBER: [unclear]
VEHICLE IDA NUMBER: [unclear]
TIME: [unclear] DATE: [unclear]
ISSUED BY: [unclear]

APPROPRIATE AGENCY: [unclear] TOLSON COUNTY

[Handwritten signature]

APPROPRIATE AGENCY: [unclear] TOLSON COUNTY

STATE OF NEW YORK

IN SENATE

OFFICE OF THE COMPTROLLER

STATE OF NEW YORK

REPORT OF THE COMPTROLLER

ON THE STATE OF NEW YORK

FOR THE YEAR ENDING

DECEMBER 31, 1999

AS REQUIRED BY SECTION 17

OF THE CONSTITUTION

AND SECTION 17

OF THE STATE FINANCE

ARTICLE 17 OF THE CONSTITUTION

AND SECTION 17 OF THE

STATE FINANCE ARTICLE 17

OF THE CONSTITUTION

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STATE FINANCE ARTICLE 17

OF THE CONSTITUTION

[Handwritten signature]

PERMIT INFORMATION: LUBBERS DELLS

T L R # 3214438

REGISTRATION: 10 JANIT... INC.
1445 SW HIGHWAY 22
ACORNVILLE, OR 97113
PHONE: 503-254-5725
TELEFAX: 503-254-5725

PARSON COUNTY
CUSTOMER ACCT# 5041307
VEHICLE ID# PAR1307
TIME: 11:29 DATE: 12-04-1997
MANUAL TICKET# N/A

PROJECT: 501-5111
MATERIAL: 4-2-72
SOURCE: 04 PR
ISSUE PERMIT: 4-2-72 NAME: PARSON COUNTY
VEHICLE: 1 GROSS: 4122.00000 TARIFF: 17.10(34400) NET: 31,421.64541
ISSUE PERMIT: 0010

PERMIT METHOD: "EMPOW" ADDON" RESE

PERMIT OFF: *(Signature)*

STATE OF MISSISSIPPI

77 AL 12 44 22 12 44 22 12

1. REGISTERED OR REGISTERED TO
 1141 28 Highway 44
 CHICKASAW 38 0110
 NUMBER 9753-1-4-158
 LICENSE 21 10

WARDON COUNTY
 CUSTOMER ACCT# 504130
 VEHICLE REG #44130
 TITLE 2198 DATE 11/04/58
 MANUAL TICKET# 204

2. ADOPTED 20-1-501
 MAILED 1001
 3. 20-1-501
 4. 20-1-501
 5. 20-1-501
 6. 20-1-501
 7. 20-1-501
 8. 20-1-501
 9. 20-1-501
 10. 20-1-501

ADDITIONAL COMMENTS

PRINTED

Pamela *Sto*

STATE OF MISSISSIPPI DEPARTMENT OF REVENUE

SALE TAX RECEIPT
SALE TAX NO. 123456789
SALE TAX AMOUNT \$100.00
SALE TAX PERCENT 10.00%
SALE TAX DATE 01/01/2020
SALE TAX COUNTY HANCOCK COUNTY

SALE TAX RECEIPT NO. 123456789
SALE TAX AMOUNT \$100.00
SALE TAX PERCENT 10.00%
SALE TAX DATE 01/01/2020
SALE TAX COUNTY HANCOCK COUNTY
SALE TAX PURCHASER NAME
SALE TAX PURCHASER ADDRESS
SALE TAX PURCHASER CITY
SALE TAX PURCHASER STATE
SALE TAX PURCHASER ZIP

[Handwritten Signature]

W. J. JENNIFER AND L. J. JENNIFER

711 4th St. St. Louis, Mo.

SUBSIDIARY OF SAFFORD, INC.
1200 3rd Avenue
MINNEAPOLIS, MN 55402
PHONE (603) 555-1234
PREPARED BY: M

SAFFORD COUNTY
CUSTOMER ACCT# 5501234
VEHICLE ID# MNP1234
TIME# 1248 DATE# 12-04-1988
MANUAL TICKETS# N/A

ACCOUNT# 5501234
MALL# 1234
DATE# 12-04-1988
NET# 12,345.67
TAX# 1,234.56
TOTAL# 13,580.23

SAFFORD COUNTY SAFFORD ACCOUNT

ACCOUNT#

W. J. Jennifer

JOHN J. JENNIFER, JR. LAMPSON, ILL.

77 E. 16th St. 22 E. 4th St. 22 E. 4th St.

SUBSIDIARY OF SANITEL, INC.
13400 SW HIGHWAY 15
PORTLAND, OR 97223
PHONE: 503-722-2788
FAX: 503-722-2788

MARION COUNTY
CUSTOMER ACCT# 5001397
VEHICLE ID# 1981397
TIME: 1418 DATE: 12/26/1999
MANUAL TICKETS N/A

AMOUNT: CONT/CONT PO#1 PERMIT 4455
HAULER: 11-12 HAULER TICKET NUMBER:
SOURCE: 11 OF 1981397
VEHICLE ID# 1981397 MARION COUNTY #R07M1 NH
TONE (LBS): GROSS: 53,421 (6840) TARE: 17,74 (3580) NET: 35,68 (7150)
CURET YARDS: 30,0

PAYMENT METHOD: CHARGE ACCOUNT FEES

AS

SIGNATURE:

PAID BY: [unclear] L. [unclear] I. L.

T. H. [unclear] 01.14.93

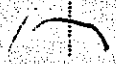
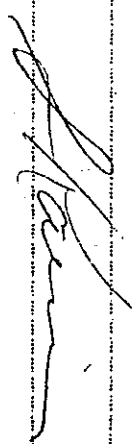
A. SUBSTITUTION OF INITIALS: [unclear]
1966 SW HIGHWAY 15
MARRIONVILLE, IN 46782
PHONE: (317) 72-5795
REGISTERED BY: KH

MARRION COUNTY
CUSTOMER ACCT# 5091357
VEHICLE ID# MARR1357
TIME: 14132 DATE: 12-04-1993
MANUAL TICKETS: N/A

PERMIT: 3017901L PERM: PERMIT #495
HALLER: 3017901L HALLER TICKET NUMBER:
SOURCE: 3R MAR -
GEN: PERMIT #495 HALLER: MARRION COUNTY
TONE: (LBS) GROSS: 48,64 (25800) TARE: 19,34 (38690) NET: 29,10 (58200)
TARE: TARE: 30,1

PAYMENT METHOD: CASH/PERM ACCOUNT FEES

SIGNATURE:



PAID BY: 10/10/10 10:00 AM

7 5 16 10 20 1 4 4 10

SUBJECT: OF SAVITIA, INC.
11607 SW HIGHWAY 12
PORTLAND, OR 97225
PHONE: 503-473-2788
PREPARED BY: MN

MARION COUNTY
CUSTOMER ACCT# 5091307
VEHICLE ID# MARI207
TIME: 14125 DATE: 10/10/10
MANUAL TICKET# N/A

APPOINT: CONT/SEIL
HALLS: 1-12
SUBJECT: OF "MARI"
ISSUE PERMIT FOR MARIION COUNTY
TOTAL BILL GROSS: 48,079.21(10) FARE: 12.21(30620) NET: 35,76.00(10)
TAX: 10.00(30)

PAYMENT METHOD: CHARGE ACCOUNT RECE

SLIP TYPE: 1

Pamela Steel

PAID AMOUNT: \$100.00

75.14.44 22.1.44 50.00

AMOUNT OF ORDER: \$100.00
ISSUED BY: [Name]
DATE: [Date]

MARION COUNTY
CUSTOMER ACCT# 00000000
VEHICLE ID# 00000000
TIME: 15:31 DATE: 12/01/99
MANUAL TICKET# N/A

AMOUNT: \$100.00
HOURS: 01:00
SOURCE: [Source]
ISSUE PERMIT NAME: MARION COUNTY
TICKET NO: 18.74.374800
ISSUE PERMIT NO: [Number]

PAYMENT METHOD: CASH/CC ACCOUNT RECE

SIGNATURE: *Debbie A*

RIVERBEND LANDFILL

TRK# 214929

A SUBSIDIARY OF SHARFILL, INC.
13487 OW HIGHWAY 15
CUMBERVILLE, OH 43014
PHONE: (603) 422-0751
PREPARED BY: LF

MARION COUNTY
CUSTOMER ACCT# 5041297
VEHICLE ID# MAR1397
TIME: 7:34 DATE: 12/09/1997
MANUAL TICKETS N/A

COMMODITY: LIGHT SOIL

FOR: PERMIT FEE

HAULER: 8

HAULER TICKET NUMBER:

SOURCE ID: OF - MAR -

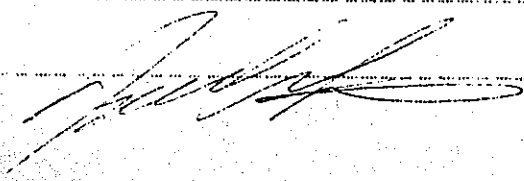
GEN# PERMIT FEE NAME: MARION COUNT ACCT# KN

TONE LBS.: GROSS: 21.25(10550) TARE: 20.25(4050) NET: 21.55(210)

UNIT: GROSS: 21.25

PAYMENT METHOD: CASH/ACCOUNT DEBIT

SIGNATURE:



RIVERBEND LANDFILL

TEL# 214-9526

A SUBSIDIARY OF SANIFILL, INC.
12447 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8700
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5011397
VEHICLE ID# MAR1397
TIME: 8:43 DATE: 12/09/1997
MANUAL TICKETS# 0/4

COMMODITY: CONT-SOIL

PC#: PERMIT 9485

HAULER: ?

HAULER TICKET NUMBER:

SOURCE ID: 00 - MAR -

GEN: PERMIT 9485 NAME: MARION COUNTY

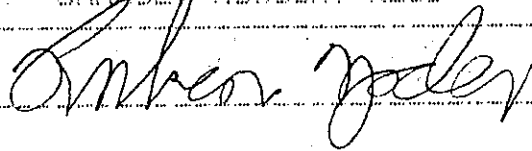
PROJ#: KH

TONS(LBS): GROSS: 57.06(114120) TARE: 17.27(34540) NET: 39.79(79580)

CUBIC YARDS: 1.0

PAYMENT METHOD: CHARGE; ACCOUNT RECE

SIGNATURE:



RIVERBEND LANDFILL

TEL# 214-9522

A SUBSIDIARY OF SANIFILL, INC.
12447 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8700
PREPARED BY: LR

MARION COUNTY
CUSTOMER ACCT# 5011397
VEHICLE ID# MAR1397
TIME: 7:36 DATE: 12/07/1997
MANUAL TICKETS# 0/4

COMMODITY: CONT-SOIL

PC#: PERMIT 9485

HAULER: 1E

HAULER TICKET NUMBER:

SOURCE ID: 00 - MAR -

GEN: PERMIT 9485 NAME: MARION COUNTY

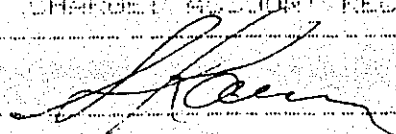
PROJ#: KH

TONS(LBS): GROSS: 31.50(63000) TARE: 15.50(31000) NET: 16.00(32000)

CUBIC YARDS: 1.0

PAYMENT METHOD: CHARGE; ACCOUNT RECE

SIGNATURE:



RIVERBEND LANDFILL

TRK# 214958

A SUBSIDIARY OF SANIFELL, INC.
12429 SW HIGHWAY 13
MCMINNVILLE, OR 97128
PHONE# (503)472-8782
PREPARED BY: SA

MARION COUNTY
CUSTOMER ACCT# 5001387
VEHICLE ID# MAR1387
TIME: 5:45 DATE: 11-09-1990
MANUAL TICKETS N/A

COMMODITY: CONT/BOTL
HAULER: 13

PO#: PERMIT #452
HAULER TICKET NUMBER:

SOURCE ID: OF - MAR -

GEN: PERMIT #452 NAME: MARION COUNTY PROJ# KH
TONS (LBS): GROSS: 48,621,973.40 TARE: 19,451,392.00 NET: 29,170,581.40
CUBIC YARDS: 112

PAYMENT METHOD: CHARGE ACCOUNT RECE

SIGNATURE: *R. Swa*

SIGNATURE: *[Signature]*
PAYMENT METHOD: CHARGE ACCOUNT RECE

HAULER: 13
SOURCE ID: OF - MAR -
GEN: PERMIT #452 NAME: MARION COUNTY
TONS (LBS): GROSS: 48,621,973.40 TARE: 19,451,392.00 NET: 29,170,581.40
CUBIC YARDS: 112
COMMODITY: CONT/BOTL
PREPARED BY: SA
PHONE# (503)472-8782
MCMINNVILLE, OR 97128
12429 SW HIGHWAY 13
A SUBSIDIARY OF SANIFELL, INC.

TRK# 214958

RIVERBEND LANDFILL

RIVERBEND LANDFILL

TRUCK 214971

A SUBSIDIARY OF SANIFILL, INC.
13487 SW HIGHWAY 18
WHEATONVILLE, OR 97149
PHONE# (503)473-8788
PREPARED BY: EP

MARION COUNTY
CUSTOMER ACCT# 5011897
VEHICLE ID# MAR1897
TIME: 7:15 DATE: 12-09-1997
ANNUAL TICKETS# N/A

COMMODITY: CONT/SCIL
HAULER: 2

ROW: PERMIT #455
HAULER TICKET NUMBER:

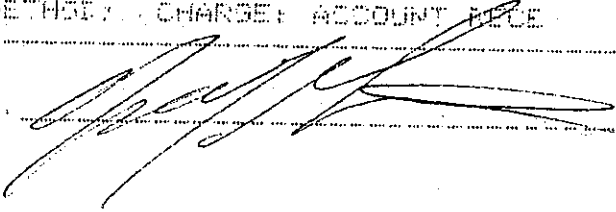
SOURCE ID: OF - MAR -

GEN: PERMIT #455 NAME: MARION COUNTY

PROJ# : KH

TONS(LBS): GROSS: 51.64(103280) TARE: 20.23(40460) NET: 31.41(62820)
CUBIC YARDS: 1.0

PAYMENT METHOD: CHARGE; ACCOUNT RECE

SIGNATURE: 

10

RIVERBEND LANDFILL

TRUCK 214958

A SUBSIDIARY OF SANIFILL, INC.
13487 SW HIGHWAY 18
WHEATONVILLE, OR 97149
PHONE# (503)473-8788
PREPARED BY: EP

MARION COUNTY
CUSTOMER ACCT# 5011897
VEHICLE ID# MAR1897
TIME: 7:15 DATE: 12-09-1997
ANNUAL TICKETS# N/A

COMMODITY: CONT/SCIL
HAULER: 27

ROW: PERMIT #455
HAULER TICKET NUMBER:

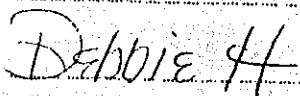
SOURCE ID: OF - MAR -

GEN: PERMIT #455 NAME: MARION COUNTY

PROJ# : KH

TONS(LBS): GROSS: 50.55(101120) TARE: 18.00(36000) NET: 32.55(65120)
CUBIC YARDS: 1.0

PAYMENT METHOD: CHARGE; ACCOUNT RECE

SIGNATURE: 

FOR WERBEND LANDFILL

TANK # 2149715

A SUBSIDIARY OF SANITILL, INC.
21457 SW HIGHWAY 13
MORNINGVILLE, OR 97138
PHONE: (503) 735-8702
PREPARED BY: JER

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 10:45 DATE: 12/09/1999
MANUAL TICKETS# N/A

COMMODITY: SOIL CONT./SOIL

FOR PERMIT #455
HAULER TICKET NUMBER:

HAULER: 1-12

SOURCE ID: OR - MAR

GEN: PERMIT #455 NAME: MARION COUNTY

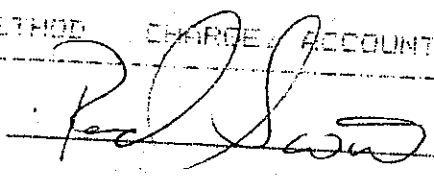
PROJ# 134

TONS (LBS): GROSS: 47,931(8884) TARE: 19,641(39280) NET: 28,290(56050)

CUBIC YARDS: 30.0

* PAYMENT METHOD: CHARGE: ACCOUNT RECE.

SIGNATURE:



12

FOR WERBEND LANDFILL

TANK # 2149712

A SUBSIDIARY OF SANITILL, INC.
21457 SW HIGHWAY 13
MORNINGVILLE, OR 97138
PHONE: (503) 735-8702
PREPARED BY: JER

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 8:30 DATE: 12/09/1999
MANUAL TICKETS# N/A

COMMODITY: SOIL CONT./SOIL

FOR PERMIT #455
HAULER TICKET NUMBER:

HAULER: 10

SOURCE ID: OR - MAR

GEN: PERMIT #455 NAME: MARION COUNTY

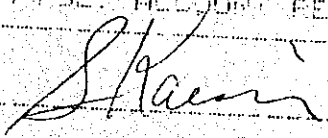
PROJ# KH

TONS (LBS): GROSS: 50,351(104500) TARE: 19,441(39280) NET: 30,910(56050)

CUBIC YARDS: 11.5

* PAYMENT METHOD: CHARGE: ACCOUNT RECE.

SIGNATURE:



RIVERBEND LANDFILL

TICKET # 214974

A SUBSIDIARY OF SANFILL, INC.
12457 SW HIGHWAY 18
MCHINNIVILLE, OR 97128
PHONE# (503) 472-2799
PREPARED BY: LN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1297
TIME: 11:04 DATE: 12/09/1997
MANUAL TICKET# N/A

COMMODITY: CONT/BDIL
HAULER: L-B

FORM: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

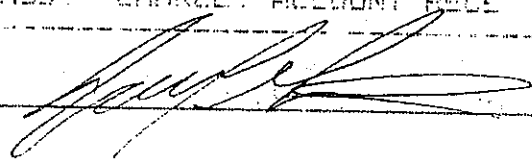
GEN: PERMIT #455 NAME: MARION COUNTY

PROJ#: 104

TONS (LBS): GROSS: 45,571 (95,100) TARE: 20,231 (40,460) NET: 25,340 (54,640)
CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE: ACCOUNT BLDG

SIGNATURE:



RIVERBEND LANDFILL

TICKET # 214952

A SUBSIDIARY OF SANFILL, INC.
12457 SW HIGHWAY 18
MCHINNIVILLE, OR 97128
PHONE# (503) 472-2799
PREPARED BY: LN

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1297
TIME: 11:00 DATE: 12/09/1997
MANUAL TICKET# N/A

COMMODITY: CONT/BDIL
HAULER: 91-27

FORM: PERMIT #455
HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

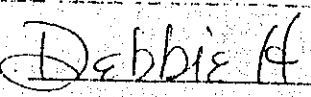
GEN: PERMIT #455 NAME: MARION COUNTY

PROJ#: 104

TONS (LBS): GROSS: 42,718 (90,960) TARE: 18,991 (37,980) NET: 23,727 (52,980)
CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE: ACCOUNT BLDG

SIGNATURE:



RIVERBEND LANDFILL

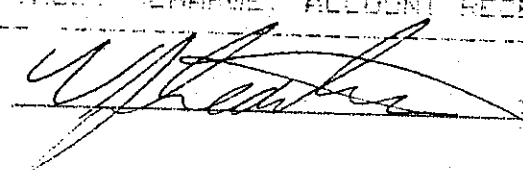
TICK# 314797

A SUBSIDIARY OF SANIFILL, INC.
17489 SW HIGHWAY 18
HEMLOCKVILLE, OR 97128
PHONE# 503-478-8788
PREPARED BY: JH

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1277
TIME: 10:41 DATE: 12/09/1998
MANUAL TICKETS# N/A

COMMODITY: CONT/50TL
HAULER: 78-33
SOURCE ID: OF - MAR - 10
GEN: PERMIT #451 NAME: MARION COUNTY PROJ#: KH
TONS (LBS): GROSS: 43.24 (90480) TARE: 17.10 (35000) NET: 27.04 (55480)
CUBIC YARDS: 30.00

PAYMENT METHOD: CHARGE, ACCOUNT RECD

SIGNATURE: 

RIVERBEND LANDFILL

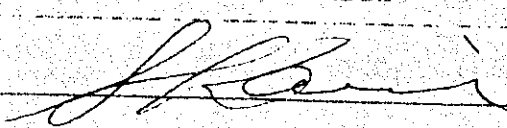
TICK# 314798

A SUBSIDIARY OF SANIFILL, INC.
17489 SW HIGHWAY 18
HEMLOCKVILLE, OR 97128
PHONE# 503-478-8788
PREPARED BY: JH

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1277
TIME: 11:15 DATE: 12/09/1998
MANUAL TICKETS# N/A

COMMODITY: CONT/50TL
HAULER: 1410
SOURCE ID: OF - MAR - 10
GEN: PERMIT #451 NAME: MARION COUNTY PROJ#: KH
TONS (LBS): GROSS: 45.47 (95990) TARE: 15.49 (32950) NET: 29.98 (63040)
CUBIC YARDS: 30.00

PAYMENT METHOD: CHARGE, ACCOUNT RECD

SIGNATURE: 

RIVERBEND LANDFILL

T 1 1 4 4 2 1 4 9 2 0

A SUBSIDIARY OF LANDFILL, INC.
13465 SW HIGHWAY 1E
MCMINNVILLE, OR 97121
PHONE: (503) 472-8788
PREPARED BY: LR

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 11:50 DATE: 12/07/1997
MANUAL TICKETS: 0-2

COMMODITY: CONT/SOIL

FORM: PERMIT 8-5E

HAULER: 75

HAULER TICKET NUMBER:

SOURCE ID: OF - MAR -

GEN: PERMIT 8-5E NAME: MARION COUNTY

PROJ#: KH

TONS (LBS): GROSS: 51.25 (102700) TARE: 17.25 (34500) NET: 34.00 (68120)

CUBIC YARDS: 11.0

PAYMENT METHOD: CHARGE/ ACCOUNT RECE

SIGNATURE:

RIVERBEND LANDFILL

T 1 1 4 4 2 1 4 9 2 4

A SUBSIDIARY OF LANDFILL, INC.
13465 SW HIGHWAY 1E
MCMINNVILLE, OR 97121
PHONE: (503) 472-8788
PREPARED BY: LR

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 10:35 DATE: 12/09/1997
MANUAL TICKETS: 0/A

COMMODITY: CONT/SOIL

FORM: PERMIT 8-5E

HAULER: 96-7C

HAULER TICKET NUMBER:

SOURCE ID: OR - MAR -

GEN: PERMIT 8-5E NAME: MARION COUNTY

PROJ#: KH

TONS (LBS): GROSS: 44.59 (89180) TARE: 17.25 (34500) NET: 27.40 (54800)

CUBIC YARDS: 30.0

PAYMENT METHOD: CHARGE/ ACCOUNT RECE

SIGNATURE:

AN. -13' 98(TUE) 13:08 RIVERBE LANDFILL

TEL:503 9770

P.002

615242

REFRINT - DUPLICATE TICKET
RIVERBEND LANDFILL Ticket 214376

A SUBSIDIARY OF SANIFILL, INC.
13469 SW HIGHWAY 18
MCMINNVILLE, OR 97128
PHONE# (503)472-8788
PREPARED BY: EM

MARION COUNTY
CUSTOMER ACCT# 5091397
VEHICLE ID# MAR1397
TIME: 8:41 DATE: 12/04/1997
MANUAL TICKET# 214351

COMMODITY: CONT/SOIL	PO#: PERMIT #455
HAULER: 12	HAULER TICKET NUMBER:
SOURCE ID: OR - MAR -	
GEN: PERMIT #455 NAME: MARION COUNTY	PROJ#: KH
TONS: GROSS: 51.24 TARE: 18.52 NET: 32.72	NET LBS: 65440
RATE: 22.500 / TON QNTY: 32.72	FRETAX CHARGE: 622.01
PAYMENT METHOD: CHARGE: ACCOUNT RECD	PAYMENT TOTAL: 736.20

TOTAL OF ALL COMMODITIES:	\$622.01
TOTAL OF ALL EXTRA CHARGES:	\$0
TOTAL OF ALL TAXES AND FEES:	\$114.19

~~GRAND TOTAL OF ALL CHARGES: \$736.20~~

615243

SIGNATURE: _____

STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable

(Carrier) Foss Environmental Shipper's No. BF-17
 Recipient, subject to the classifications and tariffs in effect on the date of this Bill of Lading: SCAC: _____ Carrier's No. _____
 at Carroll High St date 10/22 from _____

TO: (Mail or street address of consignee for purposes of notification only)
 Consignee Browns Island Landfill
 Street _____
 Destination _____ Zip _____

FROM: _____
 Shipper _____
 Street _____
 Origin _____ Zip _____

Delivering Carrier _____

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	ID. Number	Packing Group	Weight (subject to conversion)	Class or rate	Labels required (or exemption)	Check column
		Soil / dirt							
		END Dump 15 yard							
		Ten 1415							
		Dirt 1420							

Remit C.O.D. to: _____
 Address: _____
 City: _____ State: _____ Zip: _____

Charges Advanced \$ _____

C.O.D. FEE: Prepaid Collect

FREIGHT CHARGES: Collect Prepaid

SHIPPER: mfj DATE: 10/22
 PER: _____ CARRIER: _____
 PER: _____ DATE: _____

EMERGENCY RESPONSE: _____

Printed name of shipper: _____

STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable

(Carrier) Foss Environment SCAC. BI-21
 Shipper's No. BI-21
 Carrier's No. _____
 at Lowt & High St date 12/22 from _____

TO: (Mail or street address of consignee for purposes of notification only)
 Consignee Brown's Island Landfill
 Street _____
 Destination _____ Zip _____

FROM: Muldon County
 Shipper Street _____
 Origin _____ Zip _____

Delivering Carrier	HTM	Description of articles, special marks, and exceptions	Hazard Class	ID. Number	Packing Group	Weight (subject to correction)	Class or rate	Labels required (for exemption)	Check column
		<u>soil / dirt</u>							
		<u>End Dump 18 yards</u>							
		<u>Inv. 1455</u>							
		<u>ORT, 1500</u>							

Remit C.O.D. to: _____ State: _____ Zip: _____
 Address: _____
 City: _____

Charges Advanced \$ _____
 COD AMT: \$ _____

C.O.D. FEE: Prepaid Collect

SHIPPER: WJY DATE: _____
 CARRIER: _____ DATE: _____
 PER: _____
 EMERGENCY RESPONSE TELEPHONE NUMBER: _____

PLACARDS REQUIRED PLACARDS SUPPLIED

NO - FURNISHED BY CARRIER

The information contained herein is provided by the carrier for your information only. It is not intended to constitute an offer of insurance or any other financial product. The carrier is not responsible for the accuracy or completeness of the information provided herein. The carrier is not responsible for the accuracy or completeness of the information provided herein. The carrier is not responsible for the accuracy or completeness of the information provided herein.

STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable

Carrier: Foss Environmental
 Received, subject to the classifications and tariffs in effect on the date of this Bill of Lading,
 at Court & Main ST

date 10/22 from Madison County
 SCAC _____ Carrier's No. BI-25

TO: (Mail or street address of consignee for purposes of notifying origin)
 Consignee Brown's Island Landfill
 Street _____ Zip _____
 Destination _____ Zip _____

FROM: Shipper
 Street _____ Zip _____
 Origin _____ Zip _____

Delivering Carrier

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	I.D. Number	Packing Group	Weight (subject to correction)	Class or Rate	Labels required (per carton)	Check column
		<u>Soil / Rock</u>							
		<u>END AMP</u>							
		<u>37 yds</u>							

Remit C.O.D. to:
 Address: _____
 City: _____ State: _____ Zip: _____

USDOT Hazard Reg. Number _____
 Hazard Class _____
 I.D. Number _____
 Packing Group _____
 Weight (subject to correction) _____
 Class or Rate _____
 Labels required (per carton) _____
 Check column _____

Signature of Consignor _____
 Signature of Carrier _____
 Driver's Signature _____

SHIPPER: _____ PER: _____ DATE: 10/22
 CARRIER: _____ PER: _____ DATE: _____
 EMERGENCY RESPONSE TELEPHONE NUMBER: _____

PLACARDS REQUIRED
 PLACARDS SUPPLIED
 FREIGHT CHARGES Prepaid Collect
 C.O.D. FEE: Prepaid Collect
 FREIGHT CHARGES Prepaid Collect

STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable

Carrier: Foss Environmental
 (Carrier) FOSS ENVIRONMENTAL
 Pochard, subject to the classification and tariffs in effect on the date of the Bill of Lading:

Shipper's No. 62-10
 Carrier's No. _____
 SCAC: _____

at CAWCT + HIGH ST. date 10/22 from MARION COUNTY

TO: (Mail or street address of consignee for purposes of notification only.)
 Consignee BAKINIS ISLAND LAND FILL
 Street _____
 Destination 2895 Foregvt Zip
 Route: _____

FROM: Shipper MARION COUNTY
 Street _____
 Origin _____
 Zip _____

Delivering Carrier _____
 No. of packages HM Description of articles, special marks, and exceptions _____

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	ID Number	Packing Group	Weight (subject to correction)	Class or Rate	Labels required (for exemption)	Check column
		<u>soil back</u>							
		<u>End dump</u>							
		<u>HW: 1244</u>							
		<u>HW: 1302</u>							
		<u>Southern Commercial</u>							
		<u>Owens turn</u>							
		<u>2.5 miles to Foregvt</u>							

Remit C.O.D. to: _____
 Address: _____
 City: _____ State: _____ Zip: _____

Charges Advanced \$ _____
 COD AMT: \$ _____

C.O.D. FEE: Prepaid Collect

FREIGHT CHARGES: Prepaid Collect

SHIPPER: mf
 PER: _____ DATE: _____

CARRIER: _____
 PER: _____ DATE: _____

EMERGENCY RESPONSE TELEPHONE NUMBER: _____
 DATE: _____

From parent post office address of shipper _____

STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable

Shipper's No. BT-29

(Carrier) Foss placed, subject to the classification and tariffs in effect on the date of this Bill of Lading

SCAC: _____

Carrier's No. _____

at Court & High ST

date 10/23

from _____

The property described herein, in its original and unaltered condition, is being transported under the terms of a contract of carriage by air, sea, land, or water, or by any combination thereof. It is not to be used for any purpose other than that for which it is intended. The carrier is not responsible for any loss or damage to the property described herein, whether caused by fire, theft, or any other cause, unless the carrier is negligent. The carrier is not responsible for any delay in the delivery of the property described herein, whether caused by fire, theft, or any other cause, unless the carrier is negligent. The carrier is not responsible for any loss or damage to the property described herein, whether caused by fire, theft, or any other cause, unless the carrier is negligent. The carrier is not responsible for any delay in the delivery of the property described herein, whether caused by fire, theft, or any other cause, unless the carrier is negligent.

TO: (Mail or street address of consignee for purposes of notification only.)
Consignee Birney Tr
Street _____
Destination _____
Zip _____

FROM: Shipper's Street Origin
Walker Corby
Zip _____

No. of packages	HM	Description of articles, special marks, and exceptions	Hazard Class	I.D. Number	Packing Group	Weight (subject to correction)	Class or rate	Labels required (or description)	Check column
		<u>card / Rock 24 pcd</u>							

Remit C.O.D. to: _____
Address: _____
City: _____ State: _____ Zip: _____

COD AMT: \$ _____
Charges Advanced \$ _____

C. O. D. FEE: Prepaid Collect
FREIGHT CHARGES: Prepaid Collect

SHIPPER: _____
PER: WV DATE: _____
PLACARDS REQUIRED SUPPLIED

CARRIER: _____
PER: _____ DATE: _____
EMERGENCY RESPONSE TELEPHONE NUMBER: _____
Signature: _____

STRAIGHT BILL OF LADING - SHORT FORM - Original - Not Negotiable

(Carrier) Foss Shipper's No. BE-37
 Floor(s), subject to the classifications and tariffs in effect on the date of this Bill of Lading. SCAC: _____ Carrier's No. _____
 at Carters Hill date 12/23 from _____

The property described herein, as appeared on the bill of lading, is received by the carrier in good faith and condition of packages unknown to the carrier, and the carrier is not responsible for the loss of or damage to the property under the conditions herein stated. It is not to be construed as a receipt for the property until the carrier has received the property in good faith and condition of packages unknown to the carrier. It is not to be construed as a receipt for the property until the carrier has received the property in good faith and condition of packages unknown to the carrier. It is not to be construed as a receipt for the property until the carrier has received the property in good faith and condition of packages unknown to the carrier.

TO: (Mail or street address of consignee for purposes of notification only.)
 Consignee Brown's Island
 Street _____ Zip _____
 Destination _____
 Route: _____

FROM: Shipper's Street _____ Zip _____
 Street _____
 Origin _____

No. of packages	H/M	Description of articles, special marks, and exceptions	Hazard Class	ID Number	Packing Group	Weight (net/gross)	Class or rate	Labels required (for exemption)	Check column	TARE	
										Number	Weight
		<u>Soil/Rock</u>									
		<u>ad yield</u>									
		<u>Inv 0829</u>									
		<u>OUT 830</u>									

Remit C.O.D. to: _____ State: _____ Zip: _____
 Address: _____
 City: _____

SHIPPER: _____ PER: _____
 DATE: 12/23
 CARRIER: _____
 EMERGENCY RESPONSE TELEPHONE NUMBER: _____

PLACARDS REQUIRED: _____
 PLACARDS SUPPLIED: _____
 FREIGHT CHARGES: Prepaid Collect
 C.O.D. FEE: Prepaid Collect
 NO - FURNISHED BY CARRIER: YES NO

Marked as follows: the Hazardous Material is the description including storage instructions to transportation (§ 172.604)

DAILY TIME SHEET

20250

WILKINS TRUCKING CO.

339 N. Columbia • Portland, Oregon 97217

(503) 283-3000

Fax (503) 283-2454

Driver ROD SCOTT Date 11-17-97
 Truck No. L-13 Trailer No. LT9 Capacity _____ ton/yard
 Rate \$ _____ per hour (ton) yard / other _____
 Contractor or Employer Foss Environmental

Address _____
 City _____
 Job Location SALEM Job # 1168104

Time Started _____ Lunch _____ Time Finished _____

MATERIAL	HAULED FROM	HAULED TO	LOADS	TIME
DIRT	SALEM	Brown LF	4	118.82 min
DIRT	SALEM	BROWNS	1	24 min
	12388	for @ XXXX		
	24	yd @ XXXX		
TOTALS			5	

*Delete from billing
 per Michael Fry
 1/12/97 per phone call*

Driver's Signature Rod Scott

This account due and payable on the 10th day of the month following the date hereof.
 The parties expressly agree by their signatures hereto that interest shall accrue at the rate of 18% per annum on all past due accounts.
 If this account is placed in the hands of an attorney for collection the Contractor/Employer agrees to pay Sub Contractor/Employees reasonable attorney fees and collection costs even though no suit or action is filed on this account; however, if suit or action is filed, the amount of such reasonable attorney fees shall be fixed by the court.
 A lien may be claimed for labor, materials, rentals, and reasonable profit under Oregon Revised Statutes, Chapter 87

Contractor/Employer Representative acknowledges receipt of copy and signifies same to be correct by his signature below.

Signature [Signature]

DAILY TIME SHEET

21040 WILKINS TRUCKING CO.

339 N. Columbia • Portland, Oregon 97217

(503) 283-3000

Fax (503) 283-2454

Driver S KAISER Date 11-24-97

Truck No. 110 Trailer No. 110 Capacity 24 (ton/yard)

Rate \$ _____ per hour / ton / yard / other _____

Contractor or Employer Foss Environmental

Address _____

City _____

Job Location Salem

Time Started _____ Lunch _____ Time Finished _____

MATERIAL	HAULED FROM	HAULED TO	LOADS	TIME
Dirt	Salem	Brown Hill	168 yds	

TOTALS 168 yds

Driver's Signature S Kaiser

This account due and payable on the 10th day of the month following the date hereof. The parties expressly agree by their signatures hereof that interest shall accrue at the rate of 16% per annum on all past due accounts.

If this account is placed in the hands of an attorney for collection the Contractor/Employer agrees to pay Sub Contractor/Employees reasonable attorney fees and collection costs even though no suit or action is filed on this account; however, if suit or action is filed, the amount of such reasonable attorney fees shall be fixed by the court.

A lien may be claimed for labor, materials, rentals, and reasonable profit under Oregon Revised Statutes, Chapter 87.

Contractor/Employer Representative acknowledges receipt of copy and signifies same to be correct by his signature below:

Signature [Signature]

Not responsible for damage caused by delivery inside curb line.

DAILY TIME SHEET

21053 WILKINS TRUCKING CO.

339 N. Columbla • Portland, Oregon 97217

(503) 283-3000

Fax (503) 283-2454

Driver Jim DeLong Date 11-24-97

Truck No. 96-75 Trailer No. T-77 Capacity _____ ton/yard

Rate \$ _____ per hour / ton / yard / other

Contractor or Employer Foss Environmental

Address _____

City _____

Job Location Salon

Time Started 9:30 Lunch 0 Time Finished 2:30

MATERIAL	HAULED FROM	HAULED TO	LOADS	TIME
Dirt	Salon/Foss	Brown-Salem Landfill	5	5.
	120 yds.			
TOTALS			5	5.

Driver's Signature Jim DeLong

This account due and payable on the 10th day of the month following the date hereof. The parties expressly agree by their signatures hereto that interest shall accrue at the rate of 18% per annum on all past due accounts.

If this account is placed in the hands of an attorney for collection the Contractor/Employer agrees to pay Sub Contractor/Employees reasonable attorney fees and collection costs even though no suit or action is filed on this account; however, if suit or action is filed, the amount of such reasonable attorney fees shall be fixed by the court.

A lien may be claimed for labor, materials, rentals, and reasonable profit under Oregon Revised Statutes, Chapter 87

Contractor/Employer Representative acknowledges receipt of copy and signifies same to be correct by his signature below.

Signature [Signature]

Not responsible for damage caused by delivery inside curb line.

DAILY TIME SHEET

22484

WILKINS TRUCKING CO.

339 N. Columbia • Portland, Oregon 97217
 (503) 283-3000
 Fax (503) 283-2454

Driver JAMES I LARSON Date 11-17-1997
 Truck No. 92-29 Trailer No. T-69 Capacity _____ ton/yard
 Rate \$ _____ per hour (ton yard) / other _____ ton/yard
 Contractor or Employer FGSS ENVIRONMENTAL
 Address _____

Location SALEM Job # 7168104
 Started 8:15 Lunch ✓ Time Finished 4:15

SERIAL	HAULED FROM	HAULED TO	LOADS	TIME
1	ADDRESS THE STREET OF THE COURT HOUSE	RIVERBEND	4	119.6
2		BRANDS	1	24.9
TOTALS				<u>144.5</u> <u>119.6</u> <u>24.9</u>

*Delite from billing
 per. Michael tray 11/20/97
 phone call*

Signature [Signature]

Account due and payable on the 10th day of the month following the date hereof.
 Parties expressly agree by their signatures hereto that interest shall accrue at the rate of 18% per
 annum on all past due accounts.
 If an account is placed in the hands of an attorney for collection the Contractor/Employer agrees to
 pay the Contractor/Employer reasonable attorney fees and collection costs even though no suit or action
 is brought; however, if suit or action is filed, the amount of such reasonable attorney fees shall
 not be claimed for labor, materials, rentals, and reasonable profit under Oregon Revised
 Statute 87

Employer Representative acknowledges receipt of copy and signifies same to be
 true by signature below

Signature [Signature]

DAILY TIME SHEET

21088

WILKINS TRUCKING CO.

339 N. Columbia • Portland, Oregon 97217

(503) 283-3000

Fax (503) 283-2454

Driver Tim Delany Date 11-26-97
 Truck No. 96-75 Trailer No. T-77 Capacity _____ ton/yard
 Rate \$ _____ per hour ton yard other _____ ton/yard

Contractor or Employer Foss Environmental
 Address _____
 City _____

Job Location Salem Job # 7168104

Time Started 4:30 Lunch Time Finished 3:00

MATERIAL	HAULED FROM	HAULED TO	LOADS	TIME
Dirt	Salem foss	Brookside L.F. Salem	1	6.5
	24 yds total			
Dirt	Salem foss	Riverbank L.F.	3	
	Total Tons 89.4			
24 @ 3.75				
93.67 @ 4.75				
TOTALS			4	6.5

Driver's Signature Tim Delany

This account due and payable on the 10th day of the month following the date hereof.
 The parties expressly agree by their signatures hereto that interest shall accrue at the rate of 18% per annum on all past due accounts.
 If this account is placed in the hands of an attorney for collection the Contractor/Employer agrees to pay Sub Contractor/Employees reasonable attorney fees and collection costs even though no suit or action is filed on this account; however, if suit or action is filed, the amount of such reasonable attorney fees shall be fixed by the court.
 A lien may be claimed for labor, materials, rentals, and reasonable profit under Oregon Revised Statutes, Chapter 87.

Contractor/Employer Representative acknowledges receipt of copy and signifies same to be correct by his signature below

Signature *Unable to sign out

Not responsible for damage caused by delivery inside curb line.

copy made 11/24/97

SOLD TO: MISS ENVIRONMENTAL

DELIVER TO: BROWN TSLAN

PRICE:

TRUCK #: L-8 T-30 P.Q. #:

WADYTON

CRUSHED ROCK:

4"-0 3"-0 2"-0 1 1/2"-0 1"-0 3/4"-0 1 1/2"-3/4

ROUND ROCK:

1 1/2"-3/4 3/4"-1/4 OTHER

PEA GRAVEL:

3/8

SANDY LOAM:

SAND: WASHED, PIT, OTHER

PUMICE:

CINDER:

OTHER: DIRT

8 LOADS ²⁴/₄₀

STAND BY TIME:

REASON:

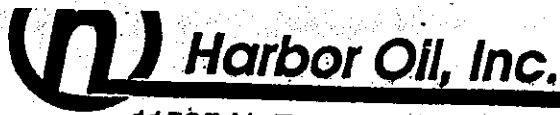


RECEIVED BY X

NOT RESPONSIBLE FOR DAMAGE CAUSED BY DELIVERING INSIDE CURB LINE.

WTC 0003

No Truck Log



No. 03311

11535 N. Force Avenue • Portland, OR 97217
Phone: (503) 285-4648 • Fax: (503) 285-9521

MATERIALS RECEIPT

Operator MARION COUNTY

Date 12-18-97

Porter FOSS

No. 2042

Purchase Order No. 2164

r No. 3030

<u>OILY H₂O</u>		<u>1000 GALS</u>	Gals Loaded	OFFICE USE ONLY	
				Unit Price	
	<u>WATER</u>	<u>HAL</u>	Gross Gals	Product	Sub Total
	<u>GROSS</u>	<u>DIST</u>	Net Gals <u>1000</u>	Freight	Sub Total
	<u>TARE</u>	<u>SW</u>			
	<u>NET</u>	<u>SS</u>		Tax	Sub Total
HKS:				Hours	Sub Total
			<u>021364</u>	TOTAL	
<u>Benny Walker</u>			RECEIVED BY <u>[Signature]</u>		

White: Customer Canary: Office Pink: Billing Goldenrod: Yard

Rinse out tanks #1 + 2, and product from Tank (diesel) located at site 8.

Mt Hood Metals
9645 N Columbia / P.O Box 83123
Portland, OR 97283-0123
(503) 283-3300 FAX (503) 283-3325

Ticket# 66037
Date 1/23/98 3:13:
Buyer
Printed 1/23/98 2:19:17 PM

Weight Purchase Ticket

FOSS ENVIRONMENTAL
5420 NORTH LAGOON AVENUE
PORTLAND, OR 97217

Hvy wt 0
Lt wt 0

Truck: Occ 1
Box:

Product	Code	Gross	Tare	Net	Price	UM	Extended
#2 HMS UNPREPARED	802-1	9760	8600	1,160	\$50.00	NT	\$29.00
				1,160			\$29.00

DIESEL TANK EXHAUSTION #8

Cash:

I represent and warrant that this material does not contain any hazardous substance as defined by Federal or State law, and I agree to indemnify Mt Hood Metals, Inc against all claims.

Check:

I certify that all CFC's and Freons have been removed from refrigerators, air conditioners, or other manufactured items, in accordance with the Clean Air Act, and that "Sealed Units" and compressors have been emptied of all oil or oil products.

Number	Date	Amount
92389	1/23/98 2:19:10 PM	\$29.00

I hereby state that I am the lawful owner of the material described hereon, that I have the right to sell the same, Mt Hood Metals, Inc., is not responsible for accidents while loading or unloading.

X _____

APPENDIX D

**NPDES DISCHARGE AND LABORATORY REPORTS
UST DECOMMISSIONING PERMIT**



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE PERMIT (17-19)
 MC RT (17-19)
 150 Un
 PERMIT NUMBER
 DISCHARGE NUMBER
 APPROVAL

FACILITY LOCATION
 Courthouse Square
 595 Court Street
 Salem, OR

ADDRESS
 100 9th Street
 Salem, OR

MONITORING PERIOD
 FROM 97 12 1 TO 97 12 31
 YEAR MO DAY

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	QUANTITY OR LOADING (3 Card Only) (46-53)			QUANTITY OR CONCENTRATION (4 Card Only) (38-45)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-71)
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
Flow	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT				257,000	gals.		*	Est.
pH	SAMPLE MEASUREMENT			8.6	8.8	std. pH units		*	Grab
	PERMIT REQUIREMENT			6.0	9.0				
TPH	SAMPLE MEASUREMENT			<0.5	<0.5	mg/L		*	Grab
	PERMIT REQUIREMENT				1.0				
Benzene	SAMPLE MEASUREMENT			<0.0005	<0.0005	mg/L		*	Grab
	PERMIT REQUIREMENT				0.025				
BTEX	SAMPLE MEASUREMENT			<0.004	0.007	mg/L		*	Grab
	PERMIT REQUIREMENT				0.25				
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1316. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

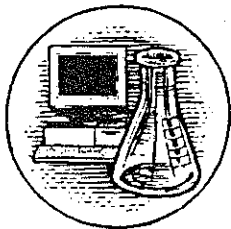
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 David Hartwig
 Risk Manager

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
 Jon Stahl
 for David Hartwig

TELEPHONE NUMBER
 503 373-4424

DATE
 98 1 6

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 * Sample collection from storage tanks prior to batch discharges on: December 1, 10, 16, 1997, and direct discharge (with filtration) on December 19, 1997.



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

December 10, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970308
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

The following sample was received on December 04, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

<u>Lab I.D.</u>	<u>Sample I.D.</u>	<u>Matrix</u>	<u>Date Taken</u>
970308-1	BT1-5 (carbon)	Water	12/04/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970308
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
BT1-5 (carbon)	970308-1	12/04/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX (Water)						
Dilution Factor		1			12/05/1997	
Benzene	8020	ND	0.5	µg/L	12/05/1997	
Toluene	8020	ND	1.0	µg/L	12/05/1997	
Ethyl Benzene	8020	ND	0.5	µg/L	12/05/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/05/1997	
TPH-418.1 (Water)						
Extraction Date					12/09/1997	
TPH-418.1	EPA 418.1	ND	0.50	mg/L	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970308
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.
Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX (Water)						
Benzene	8020	ND	0.5	µg/L	12/05/1997	
Toluene	8020	ND	1.0	µg/L	12/05/1997	
Ethyl Benzene	8020	ND	0.5	µg/L	12/05/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/05/1997	
TPH-418.1 (Water)						
TPH-418.1	EPA 418.1	ND	0.5	mg/L	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970308
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
BT1-5 (carbon)	970308-1		
Bromofluorobenzene (Surr.)	BTEX 8020	93 %	12/05/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	BTEX 8020	90 %	12/05/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970308
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)						
Benzene	50.0	51.3	102.6	µg/L	12/05/1997	
Toluene	50.0	50.9	101.8	µg/L	12/05/1997	
Ethyl benzene	50.0	51.9	103.8	µg/L	12/05/1997	
Xylenes (Total)	100	104.8	104.8	µg/L	12/05/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970308
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)									
Benzene	20.0	ND	20.08	100.4	20.92	104.6	4.1	12/05/1997	
Toluene	20.0	ND	20.76	103.8	21.77	108.9	4.7	12/05/1997	
Ethyl benzene	20.0	ND	21.02	105.1	22.00	110.0	4.6	12/05/1997	
Xylenes (Total)	40.0	ND	42.07	105.2	44.30	110.8	5.2	12/05/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970308
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)								
Benzene	25.0	26.3	105.2	25.3	101.2	3.9	12/05/1997	
Toluene	25.0	27.3	109.2	26.4	105.6	3.4	12/05/1997	
Ethyl benzene	25.0	27.7	110.8	26.6	106.4	4.1	12/05/1997	
Xylenes (Total)	50.0	57.4	114.8	52.8	105.6	8.3	12/05/1997	
TPH-418.1 (water)								
TPH-418.1	10.02	9.92	99.0	9.92	99.0	0.0	12/09/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

Specialty Analytical, An Oregon Corporation



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572

December 12, 1997

Mr. Tom Gainer
Century West Engineering
825 NE Multnomah
Suite 425
Portland, OR 97232

Specialty Analytical Job No: 970330
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

The following sample was received on December 10, 1997. This report has been completed and the results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without written approval from the laboratory. Should you have any questions regarding this report, please feel free to contact us at (503) 612-9007.

Lab I.D.
970330-1

Sample I.D.
BT1-6 (carbon)

Matrix
Water

Date Taken
12/10/1997

Report Approved By:

Project Manager
Specialty Analytical

Technical Review
Specialty Analytical

Client: Century West Engineering
 Specialty Analytical Job No: 970330
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

<u>Sample I.D.</u>	<u>Lab I.D.</u>	<u>Date Sampled</u>				
BT1-6 (carbon)	970330-1	12/10/1997				
<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
pH (Water)	150.1	8.81	0.01	units	12/10/1997	
BTEX (Water)						
Dilution Factor		1			12/11/1997	
Benzene	8020	ND	0.5	µg/L	12/11/1997	
Toluene	8020	1.3	1.0	µg/L	12/11/1997	
Ethyl Benzene	8020	0.6	0.5	µg/L	12/11/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/11/1997	
TPH-418.1 (Water)						
Extraction Date					12/11/1997	
TPH-418.1	EPA 418.1	0.5	0.5	mg/L	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
 Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970330
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

METHOD BLANK

Sample I.D.

Method Blank

<u>Parameter</u>	<u>Method</u>	<u>Sample Results</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX (Water)						
Benzene	8020	ND	0.5	µg/L	12/11/1997	
Toluene	8020	ND	1.0	µg/L	12/11/1997	
Ethyl Benzene	8020	ND	0.5	µg/L	12/11/1997	
Xylenes (Total)	8020	ND	1.5	µg/L	12/11/1997	
TPH-418.1 (Water)						
TPH-418.1	EPA 418.1	ND	0.5	mg/L	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970330
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

SURROGATE RECOVERIES

<u>Sample I.D.</u>	<u>Lab I.D.</u>		
BT1-6 (carbon)	970330-1		
Bromofluorobenzene (Surr.)	BTEX 8020	88 %	12/11/1997
<u>Sample I.D.</u>			
Method Blank			
Bromofluorobenzene (Surr.)	BTEX 8020	88 %	12/11/1997

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970330
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

CONTINUING CALIBRATION VERIFICATION REPORT

<u>Parameter</u>	<u>True Concentration</u>	<u>Concentration Found</u>	<u>Percent Recovery</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Flags</u>
pH (water)	8.00	8.02	100.3	units	12/10/1997	
pH (water)	8.00	8.05	100.6	units	12/10/1997	
BTEX-8020 (water)						
Benzene	50.0	54.4	108.8	µg/L	12/11/1997	
Toluene	50.0	56.4	112.8	µg/L	12/11/1997	
Ethyl benzene	50.0	55.9	111.8	µg/L	12/11/1997	
Xylenes (Total)	100	112.6	112.8	µg/L	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970330
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>Sample Results</u>	<u>Matrix Spike Concentration</u>	<u>Percent Recovery</u>	<u>Spike Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)									
Benzene	20.0	ND	19.6	98.0	20.7	103.5	5.5	12/11/1997	
Toluene	20.0	1.0	19.9	94.5	21.1	100.5	6.2	12/11/1997	
Ethyl benzene	20.0	0.67	20.0	96.7	21.1	102.2	5.5	12/11/1997	
Xylenes (Total)	40.0	ND	39.8	99.5	42.9	107.3	7.5	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
 Specialty Analytical Job No: 970330
 Project No.: 4080600119/4401
 Project Name: Salem - Court House Square

LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>Spike Amount</u>	<u>LCS Concentration</u>	<u>Percent Recovery</u>	<u>LCS Dup. Concentration</u>	<u>Percent Recovery</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
BTEX-8020 (water)								
Benzene	25.0	24.3	97.2	26.3	105.2	7.9	12/11/1997	
Toluene	25.0	25.1	100.4	27.1	108.4	7.7	12/11/1997	
Ethyl benzene	25.0	25.3	101.2	27.2	108.8	7.2	12/11/1997	
Xylenes (Total)	50.0	53.5	107.0	55.5	111.0	3.7	12/11/1997	
TPH-418.1 (water)								
TPH-418.1	10.02	9.63	96.0	9.63	96.0	0.0	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Specialty Analytical, An Oregon Corporation

Client: Century West Engineering
Specialty Analytical Job No: 970330
Project No.: 4080600119/4401
Project Name: Salem - Court House Square

DUPLICATE REPORT

<u>Parameter</u>	<u>Original Result</u>	<u>Duplicate Result</u>	<u>RPD</u>	<u>Date Analyzed</u>	<u>Flags</u>
pH (water)	8.81	8.76	0.6	12/11/1997	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.
Specialty Analytical, An Oregon Corporation

KEY TO FLAGS

- A. This sample not identified as a specific hydrocarbon. Quantitated against gasoline.
- A1. This sample not identified as a specific hydrocarbon. Quantitated against diesel.
- A2. This sample not identified as a specific hydrocarbon. Quantitated against lube oil.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- CN. See case narrative.
- Dil. Result was calculated from dilution.
- G. The positive result for gasoline is due to single component contamination.
- HT. Sample was received outside recommended holding times, but analyzed at clients request.
- HX. Peaks detected within the quantitation range do not match standard used.
- J. The result for this compound is an estimated concentration.
- L. The LCS recovery exceeded control limits.
- M. MS and/or MSD percent recovery exceeds control limits.
- MC. Sample concentration is greater than 5x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MP. RPD between sample duplicates or MS/MSD exceeds 20%
- MR. The MS/MSD RPD is greater than 20% The sample was re-extracted and re-analyzed with similar results. This is due to matrix interference, likely a non-homogeneity of the sample.
- MSA. Value determined by Method of Standard Additions.
- P. A post digestion spike was analyzed, and recoveries are within control limits.
- Q. Detection limits elevated due to sample matrix.
- R. The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- SR. Surrogate recovery outside control limits.
- W. The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
- X. Sample was analyzed outside of recommended holding times.
- Y. The result for this parameter was greater than the TCLP regulatory limit.
- Z. The pattern seen for the parameter being analyzed is not typical.

rev. October 14, 1997

Specialty Analytical, An Oregon Corporation

APPENDIX E
UST DECOMMISSIONING FORMS



**Oregon Department of Environmental Quality
UNDERGROUND STORAGE TANK DECOMMISSIONING/CHANGE-IN-SERVICE CHECKLIST**

DEQ FACILITY NUMBER: _____

DATE: _____

FACILITY NAME: Marion County - Courthouse Square

FACILITY ADDRESS: High Street @ Chemeketa Street, Salem, OR

PHONE: (503) 373-4424 USTs 1, 2, 3, 5, 6

A. SAFETY EQUIPMENT ON JOB SITE:

Fire Extinguisher: Type/Size: ABC/20 lb. Recharge Date: 6/97

Combustible Gas Detector: Model: Gas Tech 1314 Calibration Date: 12/11/97

Oxygen Analyzer: Model: Gas Tech 1314 Calibration Date: 12/11/97

B. DECOMMISSIONING:

All Tanks: N/A = Not Applicable (Check (v) Appropriate Box)	YES	NO	UNKNOWN	N/A
1. All electrical equipment grounded and explosion proof?	X			
2. Safety equipment on job site?	X			
3. Overhead electrical lines located?				X
4. Subsurface electrical lines off or disconnected?				X
5. Natural gas lines off or disconnected?				X
6. No open fires or smoking material in area?	X			
7. Vehicle and pedestrian traffic controlled?	X			
8. Excavation material area cleared?	X			
9. Rainwater runoff directed to treatment area?				X
10. Drained and collected product from lines?				X
11. Removed product and residual from tank?	X			
12. Cleaned tank?	X			
13. Excavated to top of tank?	X			
14. Removed tank fixtures? (pumps, leak detection equipment)				X
15. Removed product, fill and vent lines?				X

C. TANK ABANDONMENT IN-PLACE:

All Tanks: N/A = Not Applicable (Check (✓) Appropriate Box)	YES	NO	UNKNOWN	N/A
16. Sampling plan approved by DEQ?	X			
17. Contamination concerns fully resolved?	X			
18. Fill Material? Type: <u>slurry</u>	X			

D. TANK REMOVAL:

19. Tank placement area cleared, chocks placed?				
20. Purged or ventilated tank to prevent explosion? Method used: _____				
21. Were chains or steel cables wrapped around tank for removal?				
22. Tank removed, set on ground, blocked to prevent movement?				
23. Tank set on truck and secured with straps(s)?				
24. Tank labeled before leaving site?				

E. SITE ASSESSMENT:

25. Site assessed for contamination? See OAR 340-122-340	X			
26. Soil samples taken and analyzed?	X			
27. Decommissioning/Change-in-Service report sent to DEQ?	X			
28. Was contamination found? Date/Time: _____		X		
29. Was contamination reported to DEQ? By: _____				X
30. Was hazardous waste determination made for tank contents	X (UST-3)			

31. Disposal location of tank(s) contents.

Name: Harbor O.I
 Address: 11535 N. Force Ave.
Portland, OR 97217

Date: 12/18/97

Attach disposal receipt. - see report

32. Disposal or recycling location of removed tank(s) and associated piping.

Name: NA
 Address: _____

Date: _____

Attach disposal receipt.

33. If tank(s) are intended to be reused, identify new tank site.

Name: NA
 Address: _____

Date: _____

Purpose of Reuse: _____

F. WORK PERFORMED BY:

DEQ Service Provider's License #: 12391

Name: Foss Environmental Services

Telephone: 283-1150

DEQ Decommissioning Supervisor's License #: _____

Name: _____

Telephone: _____

G. CHECKLIST FILING:

1. Provide copy of checklist to the UST owner and operator.
2. Send completed checklist to the DEQ regional office for your area within 30 days after the excavation is backfilled.

NOTE: If contamination was found during decommissioning and reported to the appropriate DEQ regional office, this report may be submitted with either the first interim cleanup report or the final cleanup report, whichever is first.

RETURN COMPLETED AND SIGNED FORM TO THE DEQ REGIONAL OFFICE FOR YOUR AREA.

EASTERN REGION / BEND 2146 NE 4th, #104 Bend, OR 97701 Phone: (541) 388-6146 Fax: (541) 388-8283	EASTERN REGION / THE DALLES 400 E. Scenic Drive, #307 The Dalles, OR 97058 Phone: (541) 298-7255 Fax: (541) 298-7330	EASTERN REGION / PENDLETON 700 SE Emigrant, Suite 330 Pendleton, OR 97801 Phone: (541) 276-4063 Fax: (541) 278-0168
WESTERN REGION / SALEM 750 Front Street NE, Suite 120 Salem, OR 97310 Phone: (503) 378-8240 Fax: (503) 373-7944	WESTERN REGION / EUGENE 1102 Lincoln Street, Suite 210 Eugene, OR 97401 Phone: (541) 686-7838 Fax: (541) 686-7551	WESTERN REGION / MEDFORD 201 Main Street, Suite 2-D Medford, OR 97501 Phone: (541) 776-6136, Ext. 233 Fax: (541) 776-6262
NORTHWEST REGION 2020 SW 4th Avenue, Suite 400 Portland, OR 97201-5884 Phone: (503) 229-5263 Fax: (503) 229-6945		

I have personally reviewed this decommissioning checklist and find it to be true and complete.

Signature: _____ Date: _____
 (Licensed Supervisor)

Signature: Thomas Hamer for Marion County Date: 4/8/98
 (Owner or Operator)

For information: (503) 229-5733 or Toll Free in Oregon UST HELPLINE 1-800-742-7878

Oregon Department of Environmental Quality
UNDERGROUND STORAGE TANK DECOMMISSIONING/CHANGE-IN-SERVICE REPORT

DEQ FACILITY NUMBER: _____ DATE: _____
FACILITY NAME: Marion County - Courthouse Square
FACILITY ADDRESS: High Street @ Chemeketa Street, Salem, OR
PHONE: (503) 373-4424 USTs 1, 2, 3, 5, 6

The following information **MUST** be submitted by the underground storage tank owner, operator or licensed DEQ Supervisor within 30 days following completion of the tank decommissioning or changing tank contents to a non-regulated substance. (OAR 340-150-001 through -150).

The attached supplemental checklist should be prepared by the person performing the decommissioning or service change. The checklist should be provided to DEQ and the tank owner to demonstrate that all required practices were followed.

Ordinarily the checklist is filled out by the DEQ licensed Service Provider or Supervisor. Owners who wish to personally decommission a tank or change service must follow all DEQ and other applicable standards. The owner should contact the DEQ Regional Office prior to starting the work to receive current copies of underground storage tank regulations.

A. DATES:

Decommissioning/Service Change Notice - Date Submitted: 9/97 (30 days before work starts).
Work Start Telephone Notice - Date Submitted: _____ (3 working days before work starts).
DEQ Person Notified: Bruce Scherzinger
Date Work Started: 10/16/97 Date Work Completed: 12/31/97

Note: Provide the following information if any soil or water contamination is found during the decommissioning or service change. Contamination must be reported by the UST owner or operator within 24 hours. The licensed service provider must report contamination within 72 hours after discovery unless previously reported.

Date Contamination Reported: _____ By: _____
DEQ Person Notified: _____
Backfill Telephone Notice - Date Called: _____ (before backfilling).
DEQ Person Notified: _____

B. PERMITS: Note: DEQ permits may be needed where soil or water cleanup is required.

DEQ Water Discharge Permit #: _____ Date: _____
Disposed to (Location): _____
DEQ Solid Waste Disposal Permit #: _____ Date: _____
Soil Disposal or Treatment Location: _____

C. TANK INFORMATION:

TANK ID #	DEQ-UST PERMIT #	TANK SIZE IN GALLONS	PRODUCT: GASOLINE, DIESEL, USED OIL, OTHER?		CLOSURE OR SERVICE CHANGE?			TANK TO BE REPLACED?	
			PRESENT	NEW	TANK REMOVAL	CLOSURE IN PLACE♦	OTHER USE♦	YES*	NO
1		4,000	Gas?			X			X
2		2,000	Gas?			X			X
3		2,000	kerosene			X			X
5		575	Gas?			X			X
6		575	Gas?			X			X

- * Where decommissioned tank(s) are replaced by new underground storage tanks the UST owner or operator must submit a new permit application containing information on the new tanks 30 days before placing them in service.
- ♦ Submit a soil sampling plan to the DEQ regional office and receive plan approval prior to starting work if 1) tank is to be decommissioned in-place, 2) tank contents are changed to a non-regulated substance, 3) tank contains a regulated substance other than petroleum, or 4) tank changed to non-regulated use.

D. DISPOSAL INFORMATION:

TANK	TANK AND PIPING DISPOSAL METHOD				DISPOSAL LOCATION OF TANK CONTENTS	
	SCRAP	LAND-	OTHER	IDENTIFY LOCATION	LIQUIDS *	SLUDGES *
1					On-site water treatment	Harbor Oil, Portland
2						
3					NA	
5					NA	
6					NA	

* Note: The tank contents, the tank and the piping may be subject to the requirements of Hazardous Waste regulations. If you have questions, contact the DEQ regional office for your area.

E. CONTAMINATION INFORMATION: * Note: Sampling is required if groundwater is encountered. See cleanup rules.

TANK ID #	GROUND * WATER IN PIT ?	PRODUCT ODOR IN SOIL ?	PRODUCT STAINS IN SOIL ?	NUMBER OF SAMPLES	LABORATORY (NAME, CITY, STATE, PHONE)
1	No	No	No	2	Specialty Analytical, Tualatin, OR 612-9007
2	↓	↓	↓	2	
3	↓	↓	↓	2	
5	↓	↓	↓	2	
6	↓	↓	↓	2	

F. SITE SKETCH: (Show location of adjacent roads, property lines, structures, dispenser, & all USTs. Show North, general direction of ground slope and soil sample locations. Sketch does not need to be drawn to scale. You may attach a separate drawing.)

-see report

G. WORK PERFORMED BY:

DEQ Service Provider's License #: 12391 Construction Contractors License #: 89527

Name: Foss Environmental Services

Telephone: (503) 283-1150

DEQ Decommissioning Supervisor's License #: _____

Name: _____

Telephone: _____

DEQ Soil Matrix Service Provider's License #: 12741 (If applicable)

Name: Century West Engineering

Telephone: (503) 231-6078

DEQ Soil Matrix Supervisor's License #: 11221 (IF applicable)

Name: Ingmar Saul

Telephone: (503) 231-6078

H. ATTACHMENTS TO THIS REPORT:

1. Attach a copy of the laboratory report showing the results of all tests on all soil and water samples. The laboratory report must identify sample collection methods, sample location, sample depth, sample type (soil or water), type of sample container, sample temperature during transportation, types of tests, and copies of analytical laboratory reports, including QA/QC information. Include laboratory name, address and copies of chain-of-custody forms.
2. If contamination is detected and a Level 2 or Level 3 soil matrix cleanup standard is selected attach a copy of the soil matrix analysis for the site including methods of determining soil type, depth to groundwater, and sensitivity of uppermost aquifer.

I. REPORT FILING:

This report, signed by the tank owner or operator, complete with all applicable attachments must be filed with the DEQ regional office within 30 days after the excavation is backfilled or change-in-service is complete. Contact the DEQ regional office prior to filing this report where special circumstances exist at the site (such as water in pit, remaining pockets of contamination, etc.).

EASTERN REGION / BEND Phone: Bend (541) 388-6146	EASTERN REGION / THE DALLES Phone: The Dalles (541) 298-7255	EASTERN REGION / PENDLETON Phone: Pendleton (541) 276-4063
WESTERN REGION / SALEM Phone: Salem (503) 378-8240	WESTERN REGION / EUGENE Phone: Eugene (541) 686-7838	WESTERN REGION / MEDFORD Phone: Medford (541) 776-6136, Ext. 233
NORTHWEST REGION Phone: Portland (503) 229-5263		

NOTE: If contamination was found during site assessment at decommissioning or change-in-service and reported to the appropriate DEQ regional office, this report may be submitted with either the first interim cleanup report or the final cleanup report, whichever is first.

I have personally reviewed this report and the attachments and find them to be true and complete.

Signature: Thomas Hamer for Marion County Date: 4/8/98

For information: (503) 229-5733 or Toll Free in Oregon UST HELPLINE 1-800-742-7878

**Oregon Department of Environmental Quality
UNDERGROUND STORAGE TANK DECOMMISSIONING/CHANGE-IN-SERVICE CHECKLIST**

DEQ FACILITY NUMBER: _____ DATE: _____

FACILITY NAME: Marion County - Courthouse Square

FACILITY ADDRESS: Chemeketa Street @ High Street, Salem, OR

PHONE: (503) 373-4424 USTs 4, 8

A. SAFETY EQUIPMENT ON JOB SITE:

Fire Extinguisher: Type/Size: ABC - 20 lb. Recharge Date: 6/97

Combustible Gas Detector: Model: Gas Tech 1314 Calibration Date: 12/11/97

Oxygen Analyzer: Model: Gas Tech 1314 Calibration Date: 12/11/97

B. DECOMMISSIONING:

All Tanks: N/A = Not Applicable (Check (x) Appropriate Box)	YES	NO	UNKNOWN	N/A
1. All electrical equipment grounded and explosion proof?	X			
2. Safety equipment on job site?	X			
3. Overhead electrical lines located?				X
4. Subsurface electrical lines off or disconnected?				X
5. Natural gas lines off or disconnected?	X			
6. No open fires or smoking material in area?	X			
7. Vehicle and pedestrian traffic controlled?	X			
8. Excavation material area cleared?	X			
9. Rainwater runoff directed to treatment area?				X
10. Drained and collected product from lines?				X
11. Removed product and residual from tank?	X			
12. Cleaned tank?	X			
13. Excavated to top of tank?	X			
14. Removed tank fixtures? (pumps, leak detection equipment)				X
15. Removed product, fill and vent lines?				X

C. TANK ABANDONMENT IN-PLACE:

All Tanks: N/A = Not Applicable (Check (✓) Appropriate Box)	YES	NO	UNKNOWN	N/A
16. Sampling plan approved by DEQ?				
17. Contamination concerns fully resolved?				
18. Fill Material? Type: _____				

D. TANK REMOVAL:

19. Tank placement area cleared, chocks placed?	X			
20. Purged or ventilated tank to prevent explosion? Method used: <u>CO2</u>	X			
21. Were chains or steel cables wrapped around tank for removal?	X			
22. Tank removed, set on ground, blocked to prevent movement?	X			
23. Tank set on truck and secured with straps(s)?	X			
24. Tank labeled before leaving site?	X			

E. SITE ASSESSMENT:

25. Site assessed for contamination? See OAR 340-122-340				
26. Soil samples taken and analyzed?				
27. Decommissioning/Change-in-Service report sent to DEQ?				
28. Was contamination found? Date/Time: _____				
29. Was contamination reported to DEQ? By: _____				
30. Was hazardous waste determination made for tank contents				

31. Disposal location of tank(s) contents.

Name: Harbor Oil
 Address: 11535 N. Force Ave.
Portland, OR

Date: 12/18/97

Attach disposal receipt.

32. Disposal or recycling location of removed tank(s) and associated piping.

Name: UST-8: Mt. Hood Metals / UST-4: Schnitzer
 Address: 9645 N. Columbia Blvd.
Portland, OR

Date: 1/23/98

Attach disposal receipt.

33. If tank(s) are intended to be reused, identify new tank site.

Name: _____
 Address: _____

Date: _____

Purpose of Reuse: _____

F. WORK PERFORMED BY:

DEQ Service Provider's License #: 12391

Name: Foss Environmental Services

Telephone: 283-1150

DEQ Decommissioning Supervisor's License #: _____

Name: _____

Telephone: _____

G. CHECKLIST FILING:

1. Provide copy of checklist to the UST owner and operator.
2. Send completed checklist to the DEQ regional office for your area within 30 days after the excavation is backfilled.

NOTE: If contamination was found during decommissioning and reported to the appropriate DEQ regional office, this report may be submitted with either the first interim cleanup report or the final cleanup report, whichever is first.

RETURN COMPLETED AND SIGNED FORM TO THE DEQ REGIONAL OFFICE FOR YOUR AREA.

EASTERN REGION / BEND 2146 NE 4th, #104 Bend, OR 97701 Phone: (541) 388-6146 Fax: (541) 388-8283	EASTERN REGION / THE DALLES 400 E. Scenic Drive, #307 The Dalles, OR 97058 Phone: (541) 298-7255 Fax: (541) 298-7330	EASTERN REGION / PENDLETON 700 SE Emigrant, Suite 330 Pendleton, OR 97801 Phone: (541) 276-4063 Fax: (541) 278-0168
WESTERN REGION / SALEM 750 Front Street NE, Suite 120 Salem, OR 97310 Phone: (503) 378-8240 Fax: (503) 373-7944	WESTERN REGION / EUGENE 1102 Lincoln Street, Suite 210 Eugene, OR 97401 Phone: (541) 686-7838 Fax: (541) 686-7551	WESTERN REGION / MEDFORD 201 Main Street, Suite 2-D Medford, OR 97501 Phone: (541) 776-6136, Ext. 233 Fax: (541) 776-6262
NORTHWEST REGION 2020 SW 4th Avenue, Suite 400 Portland, OR 97201-5884 Phone: (503) 229-5263 Fax: (503) 229-6945		

I have personally reviewed this decommissioning checklist and find it to be true and complete.

Signature: _____ Date: _____
(Licensed Supervisor)

Signature: Thomas Gainer for Marion County Date: 4/8/98
(Owner or Operator)

For information: (503) 229-5733 or Toll Free in Oregon UST HELPLINE 1-800-742-7878

Oregon Department of Environmental Quality
UNDERGROUND STORAGE TANK DECOMMISSIONING/CHANGE-IN-SERVICE REPORT

DEQ FACILITY NUMBER: _____ DATE: _____

FACILITY NAME: Marion County - Courthouse Square

FACILITY ADDRESS: Chemeketa Street @ High Street, Salem, OR

PHONE: (503) 373-4424 USTs 4,8

The following information MUST be submitted by the underground storage tank owner, operator or licensed DEQ Supervisor within 30 days following completion of the tank decommissioning or changing tank contents to a non-regulated substance. (OAR 340-150-001 through -150).

The attached supplemental checklist should be prepared by the person performing the decommissioning or service change. The checklist should be provided to DEQ and the tank owner to demonstrate that all required practices were followed.

Ordinarily the checklist is filled out by the DEQ licensed Service Provider or Supervisor. Owners who wish to personally decommission a tank or change service must follow all DEQ and other applicable standards. The owner should contact the DEQ Regional Office prior to starting the work to receive current copies of underground storage tank regulations.

A. DATES:

Decommissioning/Service Change Notice - Date Submitted: 9/97 (30 days before work starts).

Work Start Telephone Notice - Date Submitted: 10/21/97 (3 working days before work starts).

DEQ Person Notified: Bruce Scherzinger - USTs 4,8 were discovered on 10/21/97.

Date Work Started: 10/21/97 Date Work Completed: 12/97

Note: Provide the following information if any soil or water contamination is found during the decommissioning or service change. Contamination must be reported by the UST owner or operator within 24 hours. The licensed service provider must report contamination within 72 hours after discovery unless previously reported.

Date Contamination Reported: _____ By: _____

DEQ Person Notified: _____

Backfill Telephone Notice - Date Called: _____ (before backfilling).

DEQ Person Notified: _____

B. PERMITS: Note: DEQ permits may be needed where soil or water cleanup is required.

DEQ Water Discharge Permit #: _____ Date: _____

Disposed to (Location): _____

DEQ Solid Waste Disposal Permit #: _____ Date: _____

Soil Disposal or Treatment Location: _____

C. TANK INFORMATION:

TANK ID #	DEQ-UST PERMIT #	TANK SIZE IN GALLONS	PRODUCT: GASOLINE, DIESEL, USED OIL, OTHER?		CLOSURE OR SERVICE CHANGE?			TANK TO BE REPLACED?	
			PRESENT	NEW	TANK REMOVAL	CLOSURE IN PLACE♦	OTHER USE♦	YES*	NO
4		250			X				X
8		1,000			X				X

- * Where decommissioned tank(s) are replaced by new underground storage tanks the UST owner or operator must submit a new permit application containing information on the new tanks 30 days before placing them in service.
- ♦ Submit a soil sampling plan to the DEQ regional office and receive plan approval prior to starting work if 1) tank is to be decommissioned in-place, 2) tank contents are changed to a non-regulated substance, 3) tank contains a regulated substance other than petroleum, or 4) tank changed to non-regulated use.

D. DISPOSAL INFORMATION:

TANK	TANK AND PIPING DISPOSAL METHOD				DISPOSAL LOCATION OF TANK CONTENTS	
	SCRAP	LAND-	OTHER	IDENTIFY LOCATION	LIQUIDS *	SLUDGES *
4	X			Schnitzer Steel	Harbor Oil	EnviroSafe Landfill Grandview, ID
8	X			Mt. Hood Metals	↓	Harbor Oil

* Note: The tank contents, the tank and the piping may be subject to the requirements of Hazardous Waste regulations. If you have questions, contact the DEQ regional office for your area.

E. CONTAMINATION INFORMATION: * Note: Sampling is required if groundwater is encountered. See cleanup rules.

TANK ID #	GROUND * WATER IN PIT?	PRODUCT ODOR IN SOIL?	PRODUCT STAINS IN SOIL?	NUMBER OF SAMPLES	LABORATORY (NAME, CITY, STATE, PHONE)
4	No	No	No	1	Specialty Analytical Tualatin, OR 612-9007
8	No	No	No	2	↓

F. SITE SKETCH: (Show location of adjacent roads, property lines, structures, dispenser, & all USTs. Show North, general direction of ground slope and soil sample locations. Sketch does not need to be drawn to scale. You may attach a separate drawing.)

- see report

G. WORK PERFORMED BY:

DEQ Service Provider's License #: 12391 Construction Contractors License #: 89527

Name: Foss Environmental Services

Telephone: (503) 283-1150

DEQ Decommissioning Supervisor's License #: _____

Name: _____

Telephone: _____

DEQ Soil Matrix Service Provider's License #: 12741 (If applicable)

Name: Century West Engineering

Telephone: (503) 231-6078

DEQ Soil Matrix Supervisor's License #: 11221 (IF applicable)

Name: Inygar Saul

Telephone: (503) 231-6078

H. ATTACHMENTS TO THIS REPORT:

1. Attach a copy of the laboratory report showing the results of all tests on all soil and water samples. The laboratory report must identify sample collection methods, sample location, sample depth, sample type (soil or water), type of sample container, sample temperature during transportation, types of tests, and copies of analytical laboratory reports, including QA/QC information. Include laboratory name, address and copies of chain-of-custody forms.
2. If contamination is detected and a Level 2 or Level 3 soil matrix cleanup standard is selected attach a copy of the soil matrix analysis for the site including methods of determining soil type, depth to groundwater, and sensitivity of uppermost aquifer.

I. REPORT FILING:

This report, signed by the tank owner or operator, complete with all applicable attachments must be filed with the DEQ regional office within 30 days after the excavation is backfilled or change-in-service is complete. Contact the DEQ regional office prior to filing this report where special circumstances exist at the site (such as water in pit, remaining pockets of contamination, etc.).

EASTERN REGION / BEND Phone: Bend (541) 388-6146	EASTERN REGION / THE DALLES Phone: The Dalles (541) 298-7255	EASTERN REGION / PENDLETON Phone: Pendleton (541) 276-4063
WESTERN REGION / SALEM Phone: Salem (503) 378-8240	WESTERN REGION / EUGENE Phone: Eugene (541) 686-7838	WESTERN REGION / MEDFORD Phone: Medford (541) 776-6136, Ext. 233
NORTHWEST REGION Phone: Portland (503) 229-5263		

NOTE: If contamination was found during site assessment at decommissioning or change-in-service and reported to the appropriate DEQ regional office, this report may be submitted with either the first interim cleanup report or the final cleanup report, whichever is first.

I have personally reviewed this report and the attachments and find them to be true and complete.

Signature: Thomas Gainer for Marion County Date: 4/8/98

For information: (503) 229-5733 or Toll Free in Oregon UST HELPLINE 1-800-742-7878